Integrated Natural Resources Management Plan

Defense Distribution Depot

San Joaquin, California

Final

May 2018

Integrated Natural Resources Management Plan

Defense Distribution Depot San Joaquin

Prepared for:

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Contract No. W91278-15-D-0018
Task Order 0002

May 2018

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN, CALIFORNIA

This Integrated Natural Resources Management Plan, dated May 2018, has been prepared in accordance with regulations, standards, and procedures of the Department of Defense, the U.S. Army, Defense Logistics Agency, and the Sikes Act, as amended (16 United States Code § 670a et seq.) in cooperation with the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife. The management of fish and wildlife in this INRMP reflects the mutual agreement of all parties.

To the extent that resources permit, the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, by signature of their agency representative, do hereby agree to enter a cooperative agreement program for the conservation, protection, and management of fish and wildlife resources present on the Defense Distribution Depot San Joaquin, California.

The intention of this agreement is to develop functioning, sustainable ecological communities on these sites that integrate the interests and missions of the agencies charged with conservation, protection, and management of natural resources in the public interest. This agreement may be modified and amended by mutual agreement of the authorized representatives of the three agencies. This agreement will become effective upon the date of the last signatory and shall continue in full force for a period of 5 years or until terminated by written notice to the other parties, in whole or in part, by any of the parties signing this agreement.

By their signatures below, or an enclosed letter of concurrence, all parties grant their concurrence and acceptance of the following document.

Approving Officials:

Jonathan E. Mathews
DLA Installation Operations Site Director

Jennifer M. Norris
U.S. Fish and Wildlife Service, Sacramento
Field Supervisor

James Starr
California Department of Fish and Wildlife, Napa
Environmental Program Manager

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ANNUAL REVIEW AND COORDINATION PAGE

This page is used to certify the annual review and coordination of the Integrated Natural Resources Management Plan for Defense Distribution Depot San Joaquin, California. By their signature, the certifying official acknowledges that the annual review and coordination of the Integrated Natural Resources Management Plan has occurred for the specified year.

Approving Officials:

2018

Jonathan E. Mathews DLA Installation Operations Site Director	**Date**

2019

Name Title	**Date**

2020

Name Title	**Date**

2019

Name Title	**Date**

2022

Name Title	**Date**

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Executive Summary

The Defense Logistics Agency (DLA) provides the Army, Navy, Air Force, and Marine Corps, other federal agencies, and combined allied forces with logistics, acquisition, and technical services. Defense Distribution Depot San Joaquin is the DLA's Western Strategic Platform providing services to the western United States, the Pacific Theatre, and the Indian Ocean area for the Department of Defense. DLA maintains operational control of Defense Distribution Depot San Joaquin, though the Army retains ownership of the property.

This Integrated Natural Resources Management Plan (INRMP) has been developed for use by the Defense Distribution Depot San Joaquin in accordance with the Sikes Act, as amended (16 United States Code § 670a et seq.); the Department of Defense Instruction 4715.03, *Natural Resources Conservation Program*; Defense Logistics Agency Instruction 4108, *Natural and Cultural Resources Conservation Program*; Defense Logistics Agency Regulation 1000.22, *Environmental Considerations in Defense Logistics Agency Actions*; and Army Regulation 200-1, *Environmental Protection and Enhancement*.

This INRMP provides a description of the installation and its surrounding environments, and presents various management practices designed to mitigate negative impacts and enhance the mission on regional ecosystems. These recommendations are balanced against the requirements of Defense Distribution Depot San Joaquin to accomplish its mission with the highest efficiency.

The general goals of the INRMP are as follows:

1. Identify natural resources and operational actions that compromise the function and composition of ecosystems, and develop remedies through adaptive management.
2. Sustain and enhance healthy, terrestrial and aquatic habitats that provide services and values in an ecosystem.
3. Assess, sustain, and enhance the health and habitats of fish and wildlife populations in a manner consistent with the military mission and security constraints.
4. Integrate the natural resources program with local, state, and regional environmental programs and initiatives to the maximum extent possible.

Natural resources constraints may include limiting certain activities or prohibiting access to restricted areas in order to preclude damage to important natural resources and comply with prevailing laws and regulations. These constraints can include known locations of federally listed and other special status species, areas preferentially managed for special status species, and areas with a regulatory driver (e.g., waters of the United States, including wetlands or migratory bird nest sites). The natural resources constraints at Defense Distribution Depot San Joaquin are discussed further in Section 3 and Section 5.

Throughout the development of this INRMP, management concerns were identified in a number of natural resources subject areas. One of the purposes of this INRMP is to identify current conditions as well as specific goals and objectives for each management concern and produce workable and useful solutions to reach the desired state. Existing conditions of natural resources on the installation are discussed in Section 4. The management concerns involving natural resources constraints to planning and mission operations are discussed in detail in Section 5.

Appendix C provides a list of projects to be implemented based on the management concerns, goals, and objectives discussed in Section 5.

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1 Introduction

1.1 Purpose and Guiding Principles

The purpose of this Integrated Natural Resources Management Plan (INRMP) is to integrate natural resources management with the installation mission at Defense Distribution Depot San Joaquin. INRMPs are an installation's primary tool for managing natural resources while ensuring success of the military mission. This INRMP presents practicable alternatives and recommendations that allow for the protection and enhancement of natural resources and conservation of existing ecosystems, while minimizing impacts on the installation mission.

The general goals of the INRMP are as follows:

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4. Integrate the natural resources program with local, state, and regional environmental programs and initiatives to the maximum extent possible.

1.2 Management Philosophy

As part of its mission, Defense Logistics Agency (DLA) chose to be a national leader in environmental and natural resources stewardship. The vitality of natural resources must be ensured to achieve its military mission. As a steward of natural resources, DLA acknowledges its commitment to be a conservation leader for its cognizant areas.

Conservation is an integration or blending of natural resources management and preservation designed to maintain ecosystem integrity. This INRMP is structured to successfully accomplish conservation. It is a dynamic document that will be maintained and adapted, as necessary, to reflect updated natural resources information. The development and implementation of this INRMP indicate that senior leadership at Defense Distribution Depot San Joaquin is committed to natural resources management as reflected in Department of Defense Instruction (DODI) 4715.03, *Natural Resources Conservation Program*.

The INRMP presents recommendations that allow for the protection and enhancement of natural resources and conservation of existing ecosystems, while minimizing impacts on the installation's missions.

1.3 Regulatory Drivers and Guidance

This INRMP was prepared in accordance with guidance and regulations provided in the Sikes Act, as amended; Department of Defense (DOD) Instruction 4715.03 (*Natural Resources Conservation Program*, DOD 2011); DLA Regulation 1000.22 (*Environmental Considerations in Defense Logistics*

Agency Actions, DLA 2011a); Army Regulation (AR) 200-1, (*Environmental Protection and Enhancement*, 2007); and more recent Department of the Army (DA) and DOD Sikes Act and INRMP guidance memoranda.

The Environmental Assessment of this INRMP was prepared in accordance with Defense Logistics Agency Regulation 1000.22 (*Environmental Considerations in Defense Logistics Agency Actions*, DLA 2011a) states that the DLA will comply with applicable federal, state, and local environmental laws and regulations, including the National Environmental Policy Act (NEPA). In addition, this INRMP complements the requirements of the California Environmental Quality Act (Public Resources Code 21000-21177).

According to the Sikes Act, as amended, the primary purposes of a military conservation program are conservation and rehabilitation of natural resources, sustainable multipurpose use of those resources, and public access to military lands, as allowed by safety requirements and military security. Moreover, the conservation program must be consistent with the mission-essential use of the installation and its lands. The Sikes Act, as amended, requires the preparation of an INRMP to facilitate the conservation program. The INRMP must be cooperatively developed with the U.S. Fish and Wildlife Service (USFWS) and the state fish and wildlife agency. Representatives from USFWS and the California Department of Fish and Wildlife (CDFW) provided input on this INRMP. The resulting plan reflects the mutual agreement of all parties concerning conservation, protection, and management of natural resources on the installation.

Appendix B provides a list of laws, regulations, policy, and guidance that direct natural resources management on Defense Distribution Depot San Joaquin.

1.4 Approvals, Annual Updates and Revisions

Approvals: The Sikes Act, as amended, requires the preparation of an INRMP in cooperation with USFWS and the state agencies. In addition, it is required that the resulting Plan reflect the mutual agreement of the parties concerning conservation, protection, and management of fish and wildlife resources. This is the first INRMP prepared for Defense Distribution Depot San Joaquin, and mutual agreement of the parties is confirmed on the approval page. This INRMP is effective for 5 years from the date of approval.

Annual Updates: INRMPs must also be reviewed by installations at least once per year to verify the following (U.S. Army 2006):

- Current information on INRMP project funding.
- All “must fund” projects and activities have been budgeted for, and implementation is on schedule.
- All required trained natural resources positions are filled or are in the process of being filled.
- Projects and activities for the upcoming year have been identified and included in the INRMP. An updated project list does not necessitate INRMP revision.
- All required coordination has occurred.
- All significant changes to the installation’s mission requirements or its natural resources have been identified.

- INRMP goals and objectives are still valid.
- No net loss of mission capability has occurred due to implementation of the INRMP in accordance with the Sikes Act.

As part of the annual review, Defense Distribution Depot San Joaquin must invite annual feedback from USFWS and the state signatory agencies on the effectiveness of the INRMP, and inform the agencies which INRMP projects and activities are required to meet current natural resources compliance needs. In addition, the INRMP should be updated whenever there is a modification to the installation's mission, or there is a substantial change to the natural or cultural resources of the installation. USFWS should be informed whenever there is a modification to the INRMP or there is a substantial change to natural resources and initiate consultation if an action could affect a federally listed species. The Annual Review and Coordination page is used as a record that an annual review took place.

Revisions: The Sikes Act, as amended, and DODI 4715.03 also require that INRMPs must be reviewed for operation and effect no less than once every 5 years by DLA, USFWS, and state signatory agencies. DOD and DA have provided specific guidance on the joint review and coordination process and timeframe. Installations must document the outcome of the joint review to reflect the parties' mutual agreement, either by a jointly executed letter, receipt of signed letters from USFWS and state fish and wildlife agency, or a signed new signature page to the INRMP (U.S. Army 2006).

Per DODI 4715.03, if the 5-year INRMP review for operation and effect results in major revisions to the plan, Defense Distribution Depot San Joaquin must solicit public review and comments. The NEPA process may be used to meet public review requirements if the public is provided a meaningful opportunity to comment on the draft revised INRMP. Absent extraordinary circumstances, the public must be afforded a minimum of 30 days to review and comment on the revisions, either as part of the NEPA process or some other process. After soliciting public comments, the installation must afford USFWS and the state agencies the opportunity to review all public comments. If an existing INRMP requires only limited revisions that are not expected to result in biophysical consequences other than those anticipated for the existing INRMP then neither NEPA analysis nor public review comment are necessary.

INRMP and NEPA Integration: An Environmental Assessment (EA) has been prepared concurrently with the 2018 DLA San Joaquin INRMP. The EA evaluated the potential environmental and social consequences of implementing the 2018 INRMP and was made available for public review over a 30-day period. All public comments received were recorded and considered. Documentation of the process and correspondence can be found in Appendix D. The Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) May 2018 can be found in **Appendix F**.

1.5 INRMP Implementation and Responsibilities

Successfully implementing an INRMP requires the support of natural resources personnel, other installation staff, command personnel, and installation tenants. The following section discusses the responsibilities for INRMP implementation within DA and DLA, and other federal and state agency stakeholders.

1.5.1 Internal Stakeholders

Site Director, Installation Operations

The Site Director is responsible for maintaining the installation and all of the facilities. They are also responsible for implementation and enforcement of this INRMP and compliance with laws and regulations associated with the implementation of this plan.

Environmental Branch

The Environmental Branch has primary responsibility for natural resources management and NEPA compliance at Defense Distribution Depot San Joaquin. Responsibilities include reviewing natural and cultural resources projects on the installation and the evaluation of any potential impacts on those resources.

Other Support Proponents

Other installation proponents supporting the implementation of this INRMP include Facilities and Equipment Engineering Branch; Performance Management Branch; Morale, Welfare, and Recreation; and Security and Emergency Services.

1.5.2 Headquarters, Defense Logistics Agency

Headquarters (HQ), DLA is responsible for ensuring that this INRMP is reviewed and updated, as appropriate, every 5 years, or at lesser intervals if warranted by changing circumstances. HQ DLA and Site Director will also ensure that this plan is implemented by conducting internal natural resources self-assessments at least once every 3 years in accordance with DLA Instruction 4108.

1.5.3 Army Environmental Command

The U.S. Army Environmental Command (USAEC) provides centralized management, coordination, technical support, and execution of Army environmental programs and projects. USAEC, along with DOD, issues guidance for the preparation of an INRMP.

1.5.4 External Stakeholders

Government Agencies and Organizations

Federal Agencies

U.S. Fish and Wildlife Service

USFWS is a signatory agency of installation INRMPs in accordance with the Sikes Act, as amended. In addition, DOD and DA consult formally and informally with USFWS on federally listed species. Defense Distribution Depot San Joaquin consults with the Sacramento Fish and Wildlife Office of the

Pacific Southwest Region regarding endangered species that are known to occur or have the potential to occur on the installation.

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) provides contract management, construction management, and technical support. Defense Distribution Depot San Joaquin has the option to use USACE contracts as vehicles for natural resources management and agricultural outlease management and to access USACE organizations, such as the U.S. Army Engineer Research and Development Center for technical assistance and support for natural resources projects.

In addition, the USACE has regulatory authority over waters of the United States, which include activities within perennial and intermittent streams, and wetlands. Section 404 of the Clean Water Act (CWA) authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill materials into the waters of the United States, including wetlands. Therefore, even an inadvertent encroachment into wetlands or other waters of the United States resulting in displacement or movement of soil or fill materials has the potential to be viewed as a violation of the CWA if an appropriate permit has not been issued by USACE.

State Agencies

California Department of Fish and Wildlife

CDFW is a signatory agency for this INRMP. The mission of the department is to “manage California’s diverse fish, wildlife, and plant resources and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public”. CDFW oversees the management and use of the state’s forests and parks, fisheries, and wildlife. It has statewide responsibilities for assessing and restoring water quality and habitat; managing and regulating recreational boating, fishing, and hunting; and managing wetlands, wildlife, and rare, threatened, endangered, and species of concern. CDFW office with responsibility for Defense Distribution Depot San Joaquin is the Bay Delta Region in Napa, California.

Non-Government Agencies and Organizations

Universities

Universities often have cooperative research interests in DOD lands and can be contracted to provide technical support in natural resources management and technical expertise on specific resource issues. Seventeen universities and research institutions along with nine federal agencies (including DOD) compose the Californian Cooperative Ecosystems Studies Unit (CA-CESU). The host institution for the CA-CESU is the University of California at Berkeley. The mission of the CA-CESU is “to provide research, technical assistance and education across the biological, physical, social, and cultural sciences to address natural and cultural resource management issues at multiple scales and in an ecosystem context in California and nationally as appropriate” (CA-CESU 2004). The CA-CESU was established in July 2003 through a cooperative agreement. Defense Distribution Depot San Joaquin has access to any of the partners in the CA-CESU and can acquire their technical assistance through a task agreement.

Contractors

Defense Distribution Depot San Joaquin uses contractors for many programs and activities associated with natural resources and NEPA. Contracted actions involving natural resources can include wetland mitigation plans, cultural resources evaluations, environmental assessments for access improvements, wetland delineation reports, Installation Restoration Program activities, and analytical/environmental assessment reports for the installation master plan.

Other Interested Parties

Various national and local organizations and groups can assist in the implementation of the INRMP. These groups and organizations include The Nature Conservancy, Audubon Society, the Sierra Club, Ducks Unlimited, Boy Scouts and Girl Scouts, hunting and fishing clubs, school districts, and local residents.

1.6 Integration with Other Plans

The installation's comprehensive management planning process should incorporate the concerns presented in this INRMP so that the growth of the installation can progress in a manner consistent with, and complementary to, the objectives of DLA with respect to the protection of natural resources.

1.6.1 Regional Plans

- *California Wildlife Action Plan*: DOD and DLA encourage support of state wildlife action plans as part of a comprehensive installation natural resources program. Consequently, Defense Distribution Depot San Joaquin should consult frequently with the regional CDFW office to determine areas where the installation can participate in future wildlife conservation partnerships with the CDFW or other cooperating agencies. The 2015 Draft California State Wildlife Action Plan "establishes a strategic vision of the integrated conservation efforts needed to sustain the tremendous diversity of wildlife resources found in the state" (CDFW 2015). Projects in the INRMP support the State Wildlife Action Plan's primary goals of wildlife conservation.
- *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan*: The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan provides a strategy for balancing open space conservation and development while protecting the region's natural, economic, and social resources with a particular emphasis on listed species under the Endangered Species Act or the California Endangered Species Act (SJMSCP 2000).
- *City of Tracy Sustainability Action Plan*: The City of Tracy developed the Sustainability Action Plan which defines a long-range strategy focused on the sustainability of the community meant to achieve sustainability in greenhouse gas emissions, energy, transportation and land use, solid waste, water, agriculture and open space, biological resources, air quality, public health, and economic development (City of Tracy 2011a).

1.6.2 Installation Plans

The following installation plans were reviewed to highlight key interrelationships, and recommendations contained within these plans were used to develop this INRMP. Note that the INRMP is not intended to compile detailed information on each plan and its contents.

- *Real Property Master Plan*: The Master Plan provides the Defense Distribution Depot San Joaquin with an orderly and comprehensive guide for development to support its assigned mission over the next 20 years. The master plan was developed using a collaborative process with key personnel at the installation, and aligns with the installation's mission, vision, values, and goals; and its real property vision, goals, and objectives for future development, as established by decision makers (DLA 2013a).
- *Integrated Pest Management Plan* (IPMP): The IPMP provides guidance for implementing a pest management program at Defense Distribution Depot San Joaquin and promotes nonchemical controls for managing pests and includes management recommendations for a wide variety of pests (DLA 2016).
- *Sustainability Plan:* The Sustainability Plan is intended to assist with the installation's current efforts to meet or exceed relevant Federal mandates regarding sustainability. The Sustainability Plan identifies goals, objectives, and action plans that provide a strategy to meet the installation's sustainability goals within the constraints of available staff and funding (DLA 2013d).
- *Pollution Prevention Plan*: The Depot pollution prevention policy includes the development and implementation of a structured program that integrates pollution source reduction alternatives, including process modification, product substitution, and equipment modification, that will yield the highest possible waste reduction levels (DLA 2014c).
- *Hazardous Waste Management Plan:* This Hazardous Waste Management Plan prescribes responsibilities, policies, and procedures for accumulating and managing hazardous waste at the Defense Distribution Depot San Joaquin (DLA 2014b).
- *Cultural Resources Compliance Documentation:* The Depot has an Integrated Cultural Resources Management Plan variance because of the absence of archaeological sites and historic properties. A Historic Resources Survey was completed in 2012 (DLA 2012b) and a report was created in 2015 that summarizes all of the efforts the Depot has undertaken to document the absence of cultural resources on site.

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2 Location and Mission

Current and historic information pertaining to land uses at the Defense Distribution Depot San Joaquin and in surrounding communities is necessary to manage natural resources and assess future management activities properly. This section describes the location of the Depot and the surrounding communities and describes the natural resources associated with each area. A brief history of the installation and its current missions are also presented.

2.1 Location and Area

The Depot is located in San Joaquin County on the southeast side of Tracy, California, which is 20 miles southeast of Stockton, California (Figure 1). The operational portion comprises 448 acres of developed area which is directly south of the Depot Annex which comprises 460 acres of agricultural land (Figure 2). The Annex is bordered by Banta Road to the east, and 11th Street to the north. Two major railroad lines intersect at the eastern corner of the Depot. Union Pacific tracks are located parallel to the northern and southeastern boundaries of the Depot. The extreme majority of the Depot area is occupied by warehouses, small buildings, graveled areas, asphalt, or concrete. Landscaped areas within the Depot are very limited with the majority of landscaped areas near the Child Development Center at the center of the Depot and the recreational fields in the northwest corner of the Depot.

2.2 Installation History

During the early 1870s, Southern Pacific Railroad founded the City of Tracy and developed it as a maintenance and supply facility for trains moving to and from the San Francisco Bay Area. In 1940, the current rail lines (Southern Pacific and Western Pacific) were located in the same general location as the present day rail lines and the area was generally used as farmland which was associated with a few rural residences and associated outbuildings. In 1942, the installation was founded as a “sub depot” of the United States Army’s Quartermaster Corps, Oakland Army Depot and by the late 1950s, the Depot had been developed at its current location with a rail yard, storage yard, rows of warehouses, open storage areas, office buildings, and a sewage treatment plant. In 1963, operational control of the Depot was transferred to DLA, though DA retains ownership of the property. Adjacent land use remained largely agricultural until the 1990s at which point residential areas began to be developed adjacent to the Depot. In 1990, DOD reorganization placed all supply depots under operation of DLA. The current Depot and its sister site (Sharpe) were consolidated in 1990, and Defense Distribution Region West (DDRW) was formed with headquarters at the Sharpe Site. DDRW oversaw DLA supply facilities throughout the western states. In 1993, the Depot Annex was acquired. In 1997, DDRW and Defense Distribution Region East were consolidated into Defense Distribution Center, headquartered in New Cumberland, Pennsylvania (DLA 2012a). In 2014, DLA discontinued activities at the Sharpe Site and several of the functions of that site were transferred to the Defense Distribution Depot San Joaquin, Tracy Site.

Figure 1. Regional Location of Defense Distribution Depot San Joaquin

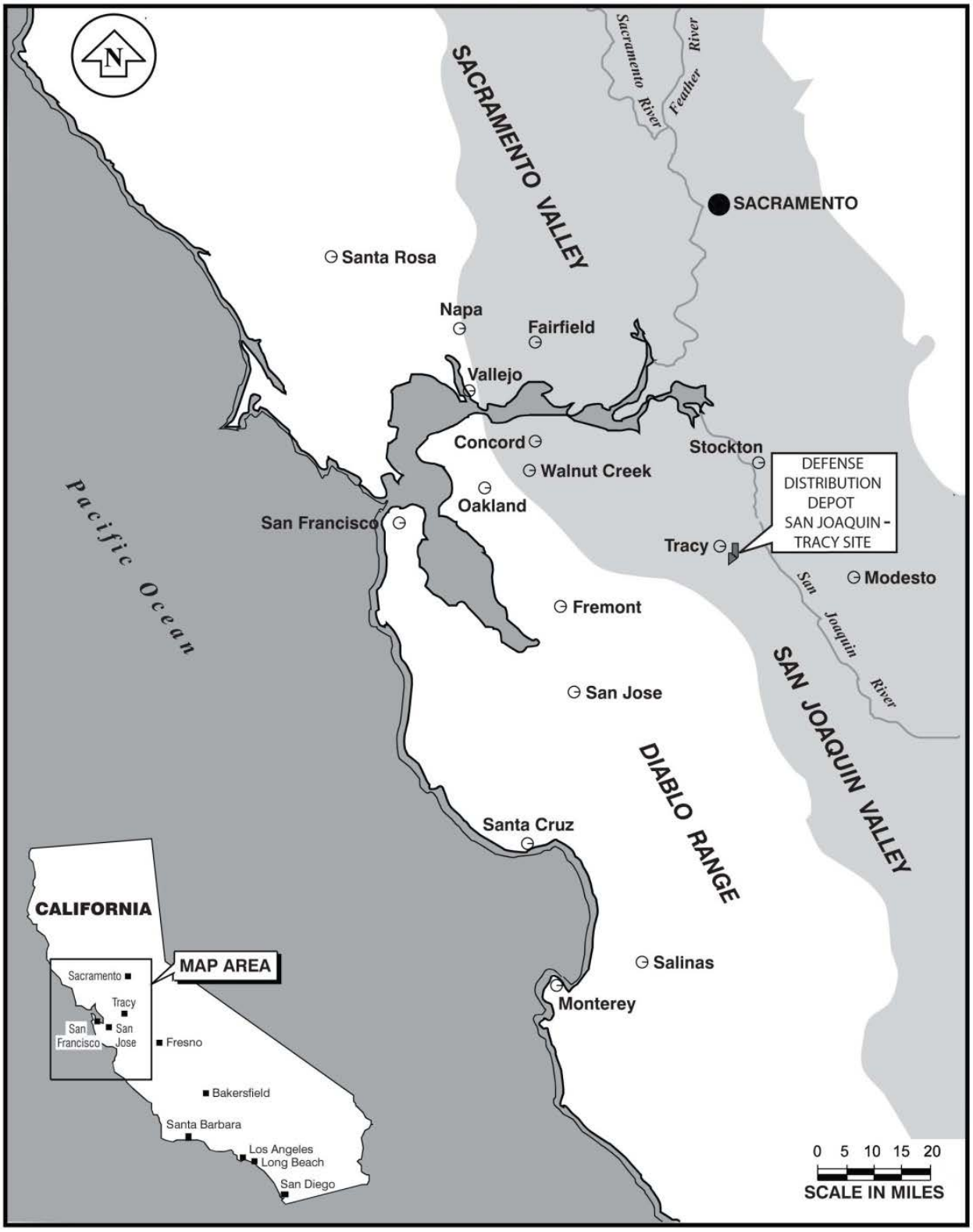
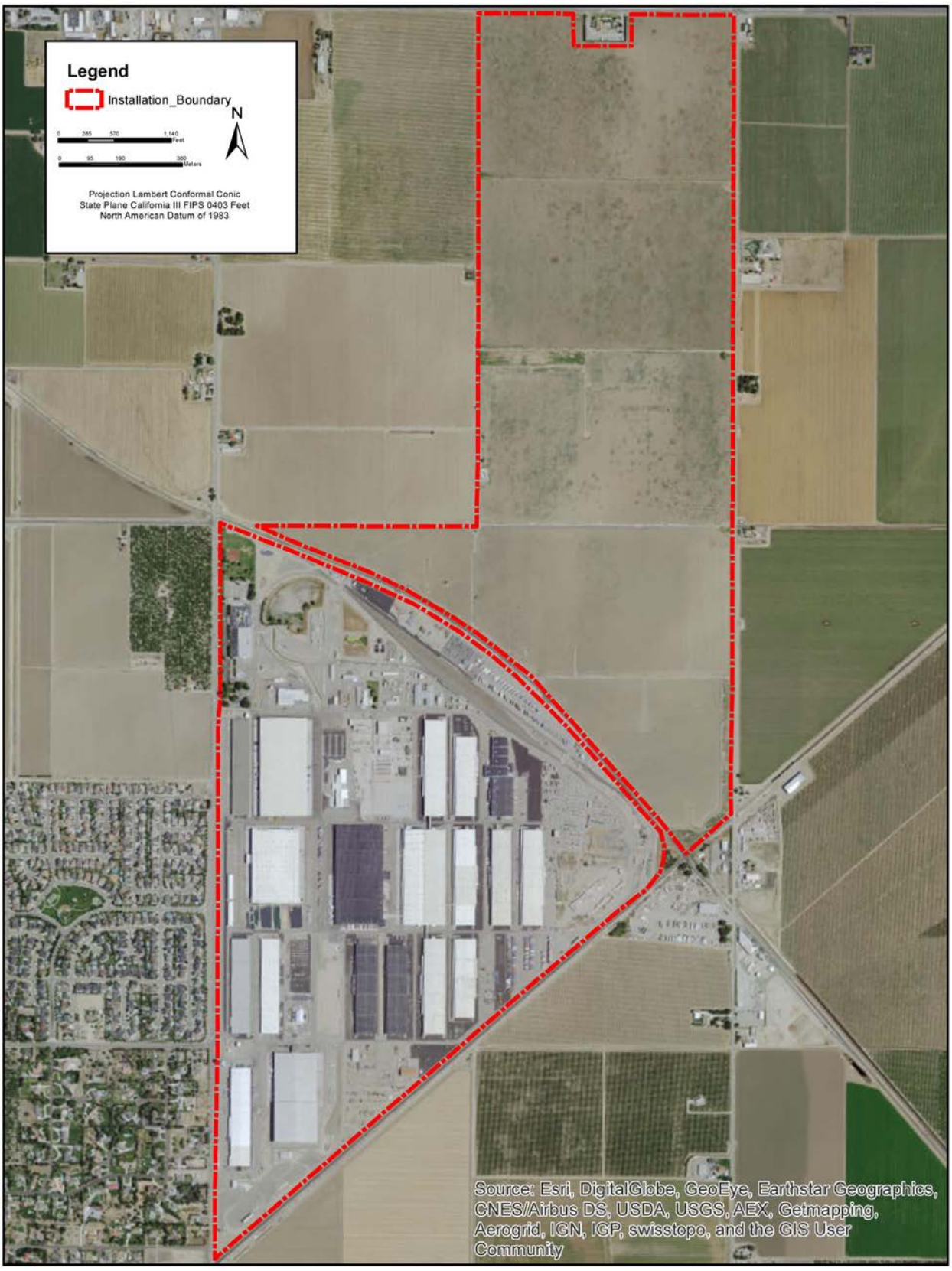


Figure 2. Location of Defense Distribution Depot San Joaquin



2.3 Current Military Missions

The primary mission of Defense Distribution Depot San Joaquin is storage, shipping, packaging, and maintenance of general supplies in support of the United States Armed Forces defense mission (DLA 2012a). The heavy Distribution Division handles bulk storage and distribution of items greater than 1.6 cubic feet or more than 15 pounds while the Light Distribution Division stores and distributes smaller items. Approximately 3,400 line items are received each day; approximately 58,000 line items are shipped. Almost 40 trucks a day operate to and from the five Light Distribution Division buildings. The Stock Positioning Division is responsible for ensuring that the various types of stock are situated in the most effective place for future distribution/storage. Additionally, 13 DLA tenants are located on the Depot, the most significant of which are USACE, Child Development Center, DLA Disposition Services, U.S. Army Public Health Command, U.S. Army Medical Materiel Command, and ASO formerly Wolverine Services (DLA 2013a).

2.4 Surrounding Communities

Surrounding communities include those within the City of Tracy and the unincorporated area of San Joaquin County. Railroad tracks divide the Depot from the Annex and form the southeastern boundary of the Depot. Residential land uses, including City of Tracy and Rural unincorporated San Joaquin County, are adjacent to the west and southwest, respectively, of the Depot, across Chrisman Road (City of Tracy 2011b, San Joaquin County 2010). The remaining properties adjacent to the Depot and Annex are in unincorporated areas of San Joaquin County and are designated primarily as agricultural, except for a small area of industrial land use immediately east of the Depot at the crossroads of the Union Pacific and California Northern railroads (City of Tracy 2011b, San Joaquin County 2014, DLA 2014a).

2.5 Local and Regional Natural Areas

Having a general understanding of the Natural Resource and Recreation Management Areas of the region is important to management of natural resources at the Depot. This understanding is needed because it provides the background for making ecological assessments and developing management goals and objectives. The adaptive management/ecological approach used in this INRMP require a basic understanding of the ecological systems of which the lands of the Depot are a part. Physical (e.g., soil, water, air) and biological (e.g., genetic) systems cross installation boundaries and therefore must be evaluated at a proper scale.

The San Joaquin River National Wildlife Refuge lies 15 miles to the southeast of the Depot. It is a 7,000-acre Refuge situated where the Tuolumne, Stanislaus, and San Joaquin Rivers join and is home several listed species. Four County Regional Parks are also in the area and they mainly offer recreational access to nearby rivers. The Mossdale Crossing Regional Park is located eight miles northeast of the Depot and offers picnic areas in addition to access to the San Joaquin, Middle, and Old Rivers. Also along the San Joaquin River is the Dos Reis Regional Park located 12 miles northeast of the Depot which offers access to the San Joaquin River and camping. The Del Valle Regional Park is located 25 miles southwest. The Brushy Peak Regional Preserve is a 1,833-acre preserve located 30 miles west of the Depot. The Caswell Memorial State Park is 20.5 miles east of the Depot and is situated along the Stanislaus River providing habitat for the riparian brush rabbit

and several other endangered species along with an example of riparian oak woodlands, a vegetation community of conservation concern in California.

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3 Environmental Management Strategy and Mission Sustainability

3.1 Supporting Sustainability of the Military Mission and the Natural Environment

DLAI 4108 (DLA 2009a) establishes policies, processes, and procedures necessary for effective natural and cultural resources management programs on lands under DLA control in the United States. Furthermore, DLAI 4108 requires that all DLA lands with natural and/or cultural resources shall develop and maintain an INRMP and/or Integrated Cultural Resources Management Plan (ICRMP) as required. This instruction identifies responsibilities for adherence to the INRMP and ICRMP implementation process.

AR 200-1 requires each installation to have designated (in writing) natural resources managers, who are knowledgeable and trained in the particular resource issues for that area or region. At Defense Distribution Depot San Joaquin, environmental office staff are responsible for ensuring natural resources on the installation are managed as required by federal, state, and Army regulation and guidance. Natural resources managers can call upon other environmental professionals within DLA, and USAEC, to assist in the management of natural resources. Defense Distribution Depot San Joaquin environmental personnel will integrate environmental protection, conservation, enhancement/restoration, and outdoor recreation within the constraints of the installation's military mission; at the same time, they will identify risks to the environment that might result from military activities and assist with the development of alternatives to reduce or eliminate the potential impacts.

Defense Distribution Depot San Joaquin does not anticipate changes in land use and development in the near future; however, the installation is well-positioned to implement and demonstrate environmentally sound land use planning and development through its land planning and NEPA processes, inter-departmental coordination, adherence to DOD and DA guidance and regulations, and timely review and update of installation site development plans. Development that occurs will be routine and flexible to preserve the natural environment. In addition, DA policy requires that all military construction projects meet a Leadership in Energy and Environmental Design (LEED) silver rating under the U.S. Green Building Council LEED 2.0 Green Building Rating System (U.S. Army 2007). All land use changes and development plans for the near-term and long-term are outlined in the Real Property Master Plan (DLA 2013a).

3.2 Management Strategy

A past trend in management has been to select and manage a single species based on their perceived importance, either as products or commodities, or their status as threatened or endangered species. While this approach can be successful in some instances, single-species management, whether a commercially valuable tree species or an endangered bird, has severe limitations recognized by the scientific and natural resources community. The health of a single species seldom acts as a good surrogate for the health of an entire ecosystem. This type of management often favors a handful of species at the expense of overall ecosystem health. Ecosystem management is a process that considers the environment as a complex system

functioning as a whole, not as a collection of parts, and recognizes that people and their social and economic needs are a part of the whole. The ecosystem management approach has the overarching goal of protecting the properties and functions of natural ecosystems. Over the long term, this approach will maintain and improve the sustainability and biological diversity of terrestrial and aquatic ecosystems while supporting sustainable economies and communities.

The Defense Distribution Depot San Joaquin natural resources management program is based on the premise that responsible stewardship and ecosystem management are synonymous and compatible with integrated natural resources management. Implementation of any type of management activity whose impacts are not fully understood will be tied directly to implementation of a corresponding monitoring program. The intent is to integrate management activities with ongoing scientific monitoring to provide reliable data and identify trends and causal relationships including both positive and negative impacts of management activities. Acceptable levels or thresholds of management intensity will be identified for different species, taxa, ecosystems, and associations. The management guidelines and prescriptions in the installation INRMP will be revised periodically as site-specific data become available. The INRMP is developed to provide ongoing management direction based on scientific data and a higher level of knowledge of the installation's ecosystems and their inter-relationships. The long-term goal of this INRMP is to bring together and integrate all management activities (e.g., watershed and wildlife management) in a way that sustains, promotes, and restores the health and integrity of the ecosystems. Integrated ecosystem management is sound stewardship, and will, over the long term, ensure the maximum return of ecosystems goods and services at minimum cost to the installation.

3.3 Natural Resources Program Management Strategy

Ecosystem management calls for enhanced efforts to understand complexity, open up to new ideas and challenges, and incorporate a broad diversity of perspectives into thoughtful, multidisciplinary management. Managers know enough about broad patterns of ecological systems to initiate well-considered management plans in an experimental fashion, monitor early results of those plans, and then modify them as more information accumulates. This process is known as adaptive management. Adaptive management is more than just monitoring effectiveness of management actions. It requires that the assumptions underlying a management approach, and expected outcome, be made explicit before action is taken. Adaptive management involves establishing hypotheses and a framework for analyzing differences between expected and observed outcomes. Adaptive management is also about experimentation and probing ecosystems to understand how they operate. The natural resources manager is not just testing a specific management approach, but is also trying to understand the structure, patterns, and processes that sustain the ecosystem integrity. Over time, this knowledge enriches the foundation for management. Adaptive management helps ensure that an installation's INRMP will not be a document on the shelf, but a framework for an ongoing management process.

DOD Manual (DODM) 4715.03 and DOD Directive 4715.21 (DOD 2014) direct DOD installations to plan for and manage risks associated with the impacts of climate change. Adaptive management of natural resources also supports climate change adaptation and resilience. Adaptive natural resources management at the Depot should consider impacts from severe weather events such as prolonged drought leading to water supply scarcity and wildland fires.

3.4 Natural Resources Compliance Requirements

Natural resources compliance focuses on maintaining compliance with major federal laws that affect Defense Distribution Depot San Joaquin activities. A list of applicable laws is included in Appendix B. The following paragraphs discuss the most relevant laws to natural resources management on the installation:

Endangered Species Act. Federal agencies are required by the Endangered Species Act (ESA) (16 United States Code [U.S.C.] § 1531 et seq.) to manage federally listed threatened, endangered, and species of concern and their habitat in a manner that promotes conservation of them and is consistent with species recovery plans. Section 7 of the ESA requires all federal agencies to enter into consultation with the USFWS or the National Marine Fisheries Service whenever proposed actions might affect federally listed threatened, endangered, and species of concern plants and animals. At the Defense Distribution Depot San Joaquin, proposed projects, operations, or other actions, are scrutinized for potential impacts on federally listed threatened, endangered, and species of concern through a formal review process. Section 7 consultations will be initiated if warranted, otherwise, written documentation that there are no effects on federally listed threatened, endangered, and species of concern will be generated by the natural resources manager and kept with the project files. The natural resources manager will use the installation's INRMP as a tool to identify at an early stage the potential impacts of planned DLA actions on endangered or threatened species and to provide a basis for altering the action to prevent or minimize those impacts.

In order to minimize adverse effects to federally-listed species, USFWS could identify changes or additional minimization measures that could result in delays and additional costs.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA) of 1918, as amended, implements treaties and conventions between the United States, Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. The MBTA made it illegal for people to "take" migratory birds, their eggs, feathers, or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof. The USFWS should be contacted prior to undertaking activities which could lead to "take" of migratory birds.

Clean Water Act. The CWA establishes the basic structure for regulating discharges of pollutants into waters of the United States and regulating quality standards for surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. The U.S. Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System permit program controls discharges.

3.5 Public Access and Outreach

The Sikes Act, as amended, and DODI 4715.03 encourage public access to DOD lands for the enjoyment and use of natural resources if such activity is compatible with the military mission and the ecosystem can support such use. Due to the nature of the military mission at Defense Distribution Depot San Joaquin, security considerations require access to the installation to be restricted. Coupled with the limited natural areas available on the installation, there are minimal opportunities for outdoor recreation for the public, and opportunities are available only to installation personnel with permitted access to the restricted area.

3.6 Natural Resources Constraints to Missions and Mission Planning

Maintaining compliance with the numerous laws, policies, and regulations that provide protection of environmental elements and guidance for management of natural and cultural resources may create constraints to accomplishing the military mission. Constraints may limit certain activities by limiting or prohibiting access to restricted areas in order to preclude damage to important cultural and natural resources. Examples of constraints include known locations of federally listed and other special status species, areas preferentially managed for special status species, and areas with a regulatory driver (e.g., jurisdictional waters or migratory bird nest sites).

As further discussed in Section 4.6.3, constraints at Defense Distribution Depot San Joaquin include the potential presence of special status species in the limited available habitat areas.

3.7 Achieving No Net Loss of the Military Mission

Implementation of this INRMP by Defense Distribution Depot San Joaquin will ensure that natural resources will continue to support the installation mission, and any future growth, or development activities planned for the installation. Supporting the elements contained within the INRMP will ensure that any future development is conducted in an environmentally sensitive way (i.e., smart growth).

This INRMP strives to integrate natural resources management with other installation plans and activities. It also establishes drivers that represent a long-term vision for the health and quality of natural resources on Defense Distribution Depot San Joaquin. The INRMP drivers might be revised over time to reflect changing missions and environmental conditions. Any future changes in mission, activity, or technology should be analyzed to assess their impacts on natural resources. As new guidance and regulations from DOD and DLA are developed, they will be integrated with the drivers and management actions of this INRMP. The INRMP will be reviewed, assessed, and modified as needed on an annual basis to ensure continued integration with other management plans or changes in military mission.

4 Existing Conditions

Defense Distribution Depot San Joaquin proposes to implement an INRMP, which supports the management of natural resources as described by the Plan itself. The following text describes the existing conditions of resources that are potentially affected by implementation of the INRMP (i.e., the Proposed Action).

4.1 Land Use

The installation consists of 908 total acres. The original site, a triangular shaped area comprising 448 acres of developed land and an additional 460 acres of land, known as the Annex (see Figure 2). Land use categories at the installation include Industrial, Administrative, and Installation Maintenance and Support (DLA 2013a). Land uses are intended to describe the general development character of an area. Master Planning process aids in siting development and protection of natural resources. The following descriptions of land uses were derived from the Master Plan (DLA 2013a, DLA 2014a).

- *Industrial.* Industrial land use consists of warehousing, transportation, and light industrial activities and encompasses most of the installation except for the northwestern corner (i.e., generally northwest of the intersection of Ennis Drive [A Street] and Medical Street).
- *Administrative.* Administrative functions such as general purpose offices, professional services, community services, and technical support facilities are located primarily at the northwestern corner of the Depot between Chrisman Road and Station Street, and at several small areas interspersed throughout the Industrial land uses in the remainder of the installation.
- *Installation Maintenance and Support.* Installation maintenance and support facilities such as maintenance, fire, safety, and utility operations are at the northwestern corner of the Depot adjacent to the east of the Administrative land uses. The installation is substantially built out with limited open spaces used for trailer storage, parking, and utility laydown yards.
- *Agricultural.* The 460 acres of the Annex is predominantly used for agriculture purposes (e.g., agricultural row crops). The Natural Resource Conservation Service classifies all soils at the installation as prime farmland, if irrigated, and the California Department of Conservation classifies the soils at the Depot as Prime Farmland and the soils at the Annex as Prime Farmland and Farmland of Local Importance (DLA 2013a). Developed areas within the Annex are limited to an environmental remediation system and a temporary (1-year) military effects tower (MET) which monitors weather conditions (see Photograph 1). The agricultural outlease on the Annex is administered by the USACE District, Sacramento.

The percent area for each designated land use zone is shown in Table 1.

4.2 Climate

The Mediterranean climate in San Joaquin County is characterized by hot, dry summers and cool, moist winters. The Sierra Nevada Range moderates the county from the continental climatic extremes that are experienced to the east. Conversely, the Coast Range moderates the effects of

moisture-laden weather systems from the Pacific Ocean. The summertime is generally hot and dry because a persistent high-pressure area offshore blocks most weather systems from entering the region. However, a southward shift of the high-pressure area in winter allows weather systems to enter the county, producing cool, moist weather and frequent heavy fogs (USDA 1992). The average annual air temperature is 61 degrees Fahrenheit with the annual high temperature at 75 degrees and annual low at 47 degrees. The average annual precipitation is 13.05 inches with the highest amount of rainfall received during January through March (NCDC 2015); most of the rainfall occurs at low- or moderate-intensity. Drought is currently a significant weather pattern that has settled across the entire state of California for the last several years. The prevailing wind flows at an average speed of 10 miles per hour, primarily from the west in the summer, and from the southeast in the winter (DLA 2012a).

Photograph 1. Agricultural Land Use at Defense Distribution Depot San Joaquin Annex

Table 1. Summary of Existing Land Uses at Defense Distribution Depot San Joaquin

Land Use	Acres	Percent of Acres
Industrial	380	42
Administrative	27	3
Installation Maintenance and Support	41	4
Agricultural	460	51
Total	**908**	**100**

Source: DLA 2013a

4.2.1 Climate Change

The State of California has led the country over the past 25 years on actions to reduce impacts from climate change by developing strategies to reduce greenhouse gas (GHG) emissions including the passage of Assembly Bill 32 in 2006. This Bill requires that California reduce its GHG emissions to 1990 levels by 2020 which is a reduction of approximately 15 percent below emissions expected under the current operating scenario. In 2015, the California Environmental Protection Agency published the *Climate Change Research Plan for California*. This plan is meant to continue support for climate policy and enhances statewide research collaboration for policy issues unique to California (CalEPA 2015).

DODI 4715.03 requires the INRMP to assess the potential impacts of climate change on natural resources and to adaptively manage such resources to minimize adverse mission impacts. DLA is reducing its GHG emissions in accordance with DOD goals. The Depot is actively working towards the reduction of GHG emissions which are managed under the Environmental Branch by the Air Program Manager and the results are tracked by the Facilities and Engineering Branch's Energy Manager. Goals supporting reduction of greenhouse gas emissions can be found in the Sustainability Plan (DLA 2013d) and the Pollution Prevention Plan (DLA 2014c).

4.3 Air Quality

The Depot is in San Joaquin County, California, which is within the San Joaquin Valley Intrastate air quality control region. San Joaquin County has been designated by the US Environmental Protection Agency as unclassified/attainment for nitrogen dioxide, sulfur dioxide, lead, and carbon monoxide; maintenance for particulate matter equal to or less than 10 microns in diameter (previously serious nonattainment); nonattainment for particulate matter equal to or less than 2.5 microns in diameter; and extreme nonattainment for 8-hour ozone (USEPA 2013). Because the Depot is not within the City of Stockton, the area affected is designated unclassified/attainment for carbon monoxide.

4.4 Geological Resources

The installation is near the west-central border of the San Joaquin Valley, which constitutes the southern region of the Great Valley Geomorphic Province. The San Joaquin Valley is a topographic and structural basin with the axis offset to the west and gently sloping to the north. It is bounded by the Sierra Nevada Range to the east, the Coast Ranges to the west, and the Sacramento River-San Joaquin River Delta to the north (DLA 2014a).

4.4.1 Geology

The Depot is located within the Tracy Sub-basin of the San Joaquin Valley Basin. This area is underlain by miles of sediment from adjacent uplands. The layers of clays, sands, silts, and gravel in the region strongly influence subsurface hydrology (USDA 2006). The lithological deposits at the Depot from the surface to a depth of 20 to 30 feet originated from materials eroded from the Diablo Range and carried east by streams or winds. These deposits are named the Younger Alluvium. Silt and clay layers occur most frequently in the interval from surface to 30 feet below ground surface. The shallow subsurface deposits are difficult to distinguish from the underlying deposits of Older Alluvium and the Upper Tulare Member of the Tulare Formation. The Tulare Formation, divided into

Upper, Middle, and Lower Members, consists of poorly sorted, discontinuous deposits of clay, silt, sand, and gravel (DLA 2012c).

4.4.2 Topography

The Depot is located in the lower San Joaquin Valley which includes floodplains, alluvial fans, fan terraces, basins, dunes, low terraces, and high terraces. San Joaquin Valley slopes are generally level although some areas are undulating to hilly because of dissection and erosion (USDA 1992). On the Depot specifically, the area is characterized by mostly flat uplands which are sloping gently downward to the northeast towards the broad delta formed by the San Joaquin and Sacramento Rivers. The elevation ranges from 110 feet above sea level at the south corner to 45 feet at the northern boundary of the Annex (URS 2010).

4.4.3 Soils

The Natural Resources Conservation Service Soil Survey Map for San Joaquin County depicts one soil series underlying the Depot and three soil series underlying the Annex (Figure 3). The predominant naturally occurring soils underlying the Depot are the Capay-Urban land complex while the Annex is mainly characterized by Capay clay, with localized areas of the El Solyo clay loam and Stomar clay loam. The Capay-Urban land complex associated with the Depot is almost entirely developed, but those areas still exposed at the surface are similar to those of Capay clay (USDA 1992).

Urban Land. Urban land consists of areas covered by development. The soil material under the impervious surface is similar to that of the Capay clay, described below. The main limitations are the slow permeability, low strength, and the high shrink-swell potential.

Capay clay. The Capay soil is very deep and moderately well drained; however, the permeability is slow. It formed in alluvium derived from mixed rock sources. Typically, the surface layer is grayish brown and approximately 20 inches thick. The subsoil to a depth of 60 inches is grayish brown. In some areas, the surface layer is silty clay. The main limitations are the slow permeability, low strength, and the high shrink-swell potential. Slope ranges from 0 to 2 percent (USDA 1992).

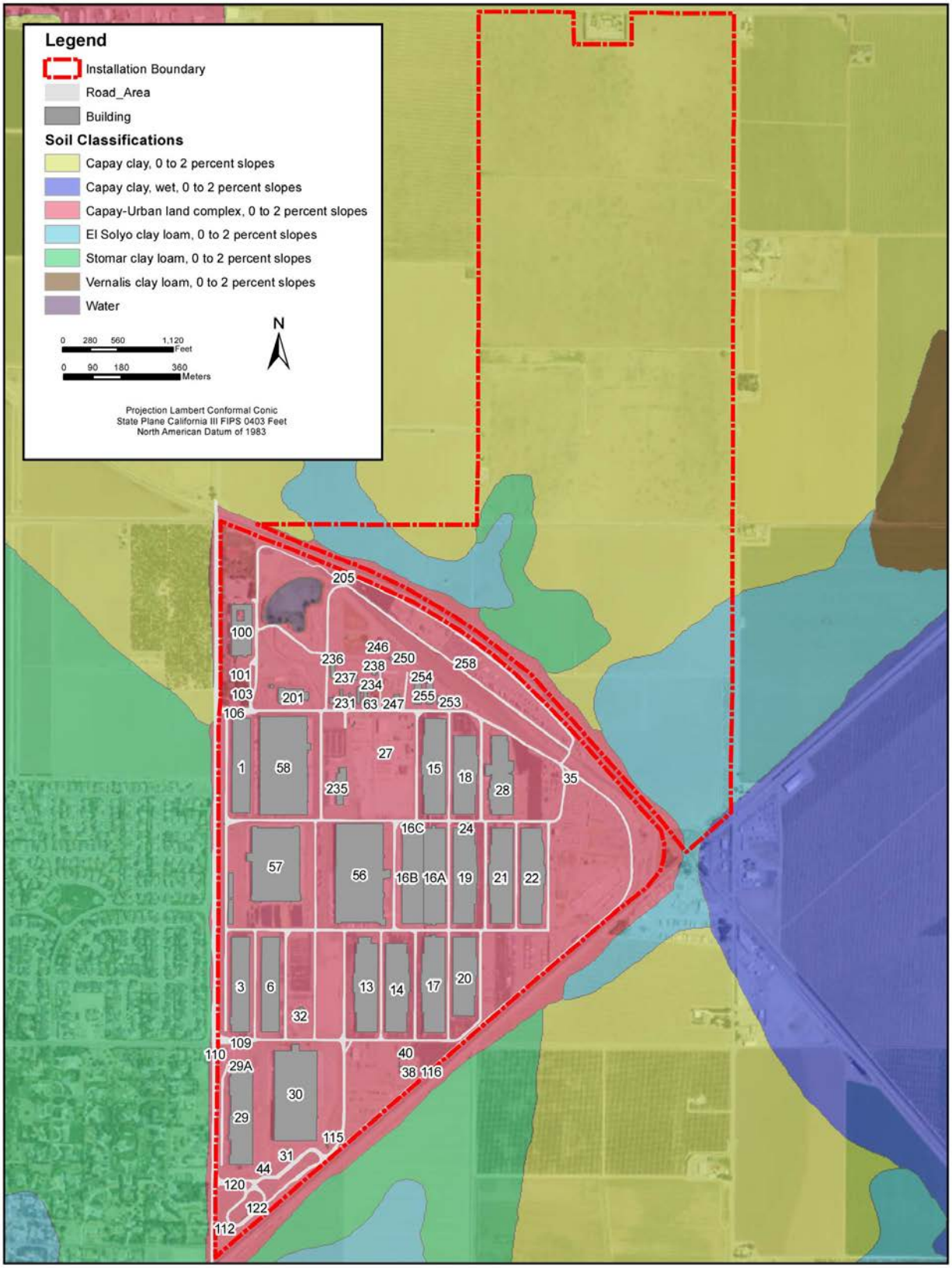
El Solyo clay loam. The El Solyo clay loam is very deep, well drained, and nearly level on alluvial fans. It formed in alluvium derived from sedimentary rock sources. The surface layer is typically grayish brown clay loam approximately 10 inches thick. The subsoil is brown and pale brown silty clay loam to approximately 60 inches. Included in this soil are small areas of Stomar, Vernalis, and Zacharias soils on the slightly higher parts of the landscape. Permeability is slow, and the available water capacity is high with a high shrink-swell potential. Slope ranges from 0 to 2 percent (USDA 1992).

Stomar clay loam. The Stomar clay loam is a very deep, well drained, nearly level soil on alluvial fans. It formed in alluvium derived from sedimentary rock sources. The surface layer is typically grayish brown clay approximately 17 inches thick. The upper 30 inches of the subsoil is brown clay loam and clay. Permeability is slow, available water capacity is very high, and the shrink-swell potential is high. Slope ranges from 0 to 2 percent (USDA 1992).

4.4.4 Geologic Hazards

Faults within the immediate vicinity of Defense Distribution Depot San Joaquin include the Midway, Black Butte, San Joaquin, and Vernalis. Other faults within 55 miles of the installation that have experienced historic displacement (i.e., within the past 200 years) include the Las Positas, Marsh Creek, Calaveras, Hayward, and San Andreas (California DOC 2010). According to the U.S. Geological Survey, there is a 2 percent chance that an earthquake will occur in a 50-year period in the vicinity of the installation that would produce ground acceleration of 16 to 32 percent of the force of gravity. Due to its seismic and geologic conditions, the installation is subject to a moderate potential for liquefaction and a moderate to high potential for expansive soils depending on the specific soil conditions and location. However, the soils near the City of Tracy, such as those at the installation, are not considered to be as susceptible to liquefaction because the near surface soils are predominantly clays or sands with high silt and clay content (San Joaquin County 2010).

Figure 3. Soil Map of Defense Distribution Depot San Joaquin



4.5 Water Resources

The Depot is located in the major hydrologic unit area of San Joaquin and in the San Joaquin watershed (HUC8). The major hydrologic features surrounding the Depot include the Sacramento and San Joaquin Rivers and their tributaries. A stretch of the American River below Folsom Lake has been designated as a National Wild and Scenic River. Two major canals are in the region: the state-owned California Aqueduct and the federal Delta-Mendota Canal. Both canals move water from California Delta to Buena Vista Lake near Bakersfield (USDA 2006).

4.5.1 Groundwater

Groundwater at the Depot occurs in surface alluvium and in the Upper and Lower Tulare Members which also serve as primary sources of fresh groundwater. The upper Tulare Member may be divided into four horizons consisting of sand, silty sand, clayey sand, and gravel layers, separated by layers of silt and clay. The depth to groundwater at the Depot ranges from approximately 10 feet below ground surface in its northeastern portion to over 40 feet below ground surface in its southern portion (URS 2010). The groundwater at the Depot is generally unconfined. Generally, groundwater historically flowed in a northeast direction. Variations in groundwater flow directions due to influences from groundwater extraction, changes in the horizontal and vertical gradients, and/or seasonal groundwater recharge have caused the flow to be towards the north to northeast direction (DLA 2012c). The annual peak groundwater levels occur during the third quarter. The Depot is classified as a non-transient, non-community drinking water system with no connection to the City of Tracy's water system. The primary source of water for the Depot is from three on-site ground water wells. This water is used for both domestic use and fire suppression activities. The Depot operates one groundwater remediation project that is discussed in more detail in the *Depot Environmental Baseline Report*, Sections 3.4 and Appendices F and G (DLA 2012a) and in the annual monitoring reports.

4.5.2 Surface Water

Surface water resources include lakes, rivers, streams, and drainage ditches and are important for a variety of reasons including their significant role in determining historical migratory and settlement patterns of virtually all mammals, including humans; their influence on nesting and migratory activities of many bird species; their contribution to the evolution of landforms through their roles in the erosion process; and their effects on critical global systems including rain patterns, global temperature changes, and oxygen provision for the atmosphere. These functions and processes have obvious economic, ecological, recreational, and human health implications.

There are no naturally occurring surface water resources on the Defense Distribution Depot San Joaquin. The principal drainages near the Depot are the Tom Payne Slough north of the Depot, Corral Hollow Creek to its south, and the San Joaquin River, into which both the Slough and the Creek flow, several miles east of the Depot. Surface water runoff from within the Depot is collected in drains that lead to the unlined stormwater detention pond located in the northwest corner of the Depot. Water evaporates or infiltrates into the ground beneath the unlined detention pond and migrates toward the water table. If the stormwater discharge pond levels exceed its capacity, the stormwater is pumped and discharged to an offsite canal (DLA 2012a). On the Annex, unlined ditches convey stormwater runoff to local percolation areas between farm fields (DLA 2012c).

Water quality changes in the surface drainages could occur during storms, and runoff from the built areas could result in erosion. Increase in sedimentation might occur during construction; however, the use of best management practices (BMPs) to minimize soils from leaving the site ameliorates any potential impacts that could occur. Hazardous materials are managed according to all applicable regulations and, therefore, should not affect water quality.

4.5.3 Floodplains

The Depot does not fall within a federally regulated floodplain. Per the California Department of Water Resources Awareness Floodplain Maps, the Depot is not within an Awareness Floodplain (100-year flood hazard area). The closest designated Awareness Floodplain is 1 mile south of the Depot. The intent of the Awareness Floodplain Mapping project is to identify all pertinent flood hazard areas for areas not mapped under the Federal Emergency Management Agency National Flood Insurance Program and to provide the community and residents an additional tool in understanding potential flood hazards in areas not currently mapped as a regulated floodplain.

4.6 Biological Resources

4.6.1 Vegetation

Historic Vegetative Cover

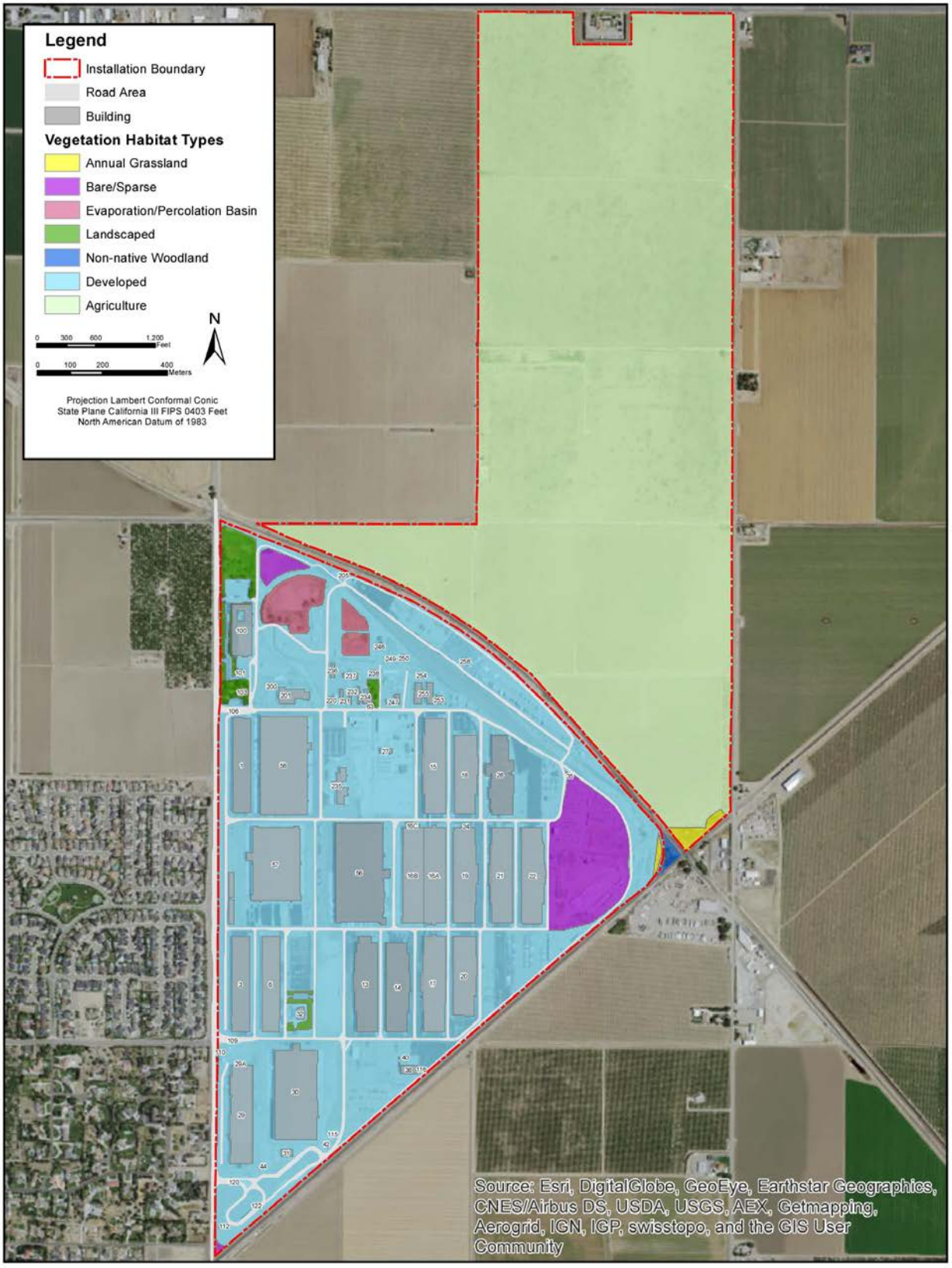
Prior to human development, the area of the Depot would have been characterized by a California perennial grassland comprised of native bunchgrasses such as purple needle grass (*Nassella pulchra*). These grasslands stand approximately three feet tall with fairly continuous cover. They would have been tolerant of both grazing and fire which were important disturbance regimes in maintaining these grasslands (Buck-Diaz et al. 2012). Tree and shrub cover in the area would have been low and confined to natural waterways and drainages where low shrubs would have provided the dominant vegetative cover.

Current Vegetative Cover

The Depot is largely developed and has little vegetative cover and even less native vegetative cover. There have been two biological surveys conducted on the Depot (1999 and 2012). These surveys documented isolated areas of vegetation that would be generally described as nonnative annual grasslands. Most of this vegetation is located in the northern and northwestern end of the Depot. These areas are dominated by various brome species (*Bromus* ssp.), Bermuda grass (*Cynodon dactylon*), yellow starthistle (*Centaurea solstitialis*), and field mustard (*Brassica rapa*). There is a large man-made stormwater retention pond located in the northern area of the Depot. Although this pond is part of a stormwater management system with artificially introduced hydrology, it supports some wetland plant species such as broadleaf cattail (*Typha* sp.), rabbitfoot (*Polypogon* sp.), and curly dock (*Rumex crispus*) (USDA 1999). The Annex is dominated by agricultural crops that vary from year to year and also harbors several invasive herbaceous species such as those listed above (DLA 2013b). The 2012 survey identified six vegetation associations (see Figure 4). The six associations are as follows:

- *Developed lands* comprise approximately 401 acres of the Depot within the fenced boundary. Developed lands include building footprints, roadways, and parking lots. These areas are devoid of vegetation and provide very little habitat for wildlife.

Figure 4. Vegetation Classification at Defense Distribution Depot San Joaquin



- *Agricultural lands* comprise 466 acres of the Annex outside of the fenced boundary of the distribution depot along the northern end of the installation. This area is used for cultivation of crops such as alfalfa and safflower. Agricultural lands provide suitable foraging habitat for many birds, reptiles, and mammals.
- *Annual grasslands* make up approximately 2 acres of the installation, occurring on the eastern end of the fenced portion of the Depot and the southeastern portion of the Annex. Common species within these areas include Bermuda grass (*Cynodon dactylon*); various Brome species (*Bromus* sp.); and forbs such as yellow starthistle, field mustard (*Bassia scoparia*) and various Erodium species. Although the vegetative cover is sparse and dispersed, this area is used by many wildlife species, including black-tailed jackrabbit (*Lepus californicus*) and desert cottontail (*Sylvilagus audubonii*).
- *Landscaped areas* make up approximately 9 acres of the Depot in northern and northwestern and southwestern portions of the Depot (see Photograph 2). These areas have nonnative ornamental trees and shrubs. Some of the common species include redwood (*Sequoia sempervirens*), maple (*Acer* sp.), alder (*Alnus* sp.), Tasmanian bluegum (*Eucalyptus globulus*), and annual bluegrass (*Poa annua*). The landscaped areas are used by a wide variety of wildlife species including migratory birds, songbirds, raptors, and small mammals.

Photograph 2. Landscaped Areas at Defense Distribution Depot San Joaquin

- *Evaporation/Percolation Basins* occur on approximately 9 acres in the northwestern portion of the Depot, near building 100. The evaporation / percolation basins consist of three artificial freshwater marsh habitats. Common species in this area include Fremont cottonwood (*Populus fremontii*), broadleaf cattail (*Typha latifolia*), various willow species (*Salix* sp.), Italian ryegrass (*Lolium perenne*), rabbitfoot (*Polypogon* sp.), curly dock (*Rumex crispus*), and mulefat (*Baccharis salicifolia*). Although this site does not contain permanent water, it provides foraging and nesting habitat for small mammals and migratory songbirds,

shorebirds, and waterfowl. This area also has a large number of feral cats (*Felis catus*). See Section 4.6.1 for details on the retention pond.

- *Bare land* covers about 25 acres in the northern, eastern and southern portions of the fenced Depot. These areas are heavily disturbed by vehicular traffic. These areas have very sparse, low vegetative cover and are of little value for wildlife.
- *Non-native Woodland* consists of approximately 1 acre directly outside of the eastern end of the fenced portion of the Depot. This area is surrounded by railroad tracks and is dominated by dense stands of the non-native plant species giant cane (*Arundo donax*) and tree of heaven (*Ailanthus altissima*).

4.6.2 Wildlife

The Depot consists mainly of disturbed lands and small, fragmented annual grasslands which provide limited habitat value for wildlife. There are no sources of perennial water on the Depot, resulting in no habitat for fish. The areas that have the potential to offer habitat to wildlife include the large water treatment retention basin, the baseball field and picnic area, and the agricultural fields in the Annex. Wildlife species were also commonly observed in the landscaped parks located in the northwestern corner of the Depot. The area of the Depot other than the Annex is surrounded by a chain-linked fence with razor wire at the top. Gates are rarely open to allow for large wildlife to enter the Depot; however, several drainage ditches and culverts have the potential to allow for passage of smaller wildlife. As a result, wildlife species likely to occur are adapted to disturbed environments and industrial settings.

Baseline biological surveys conducted in 2012 documented 56 species of wildlife including 44 bird species, eight mammal species, two reptile species, and two amphibian species. A complete list of the wildlife species observed is provided in Appendix E.

Reptiles and Amphibians

The retention basins in the northern portion of the Depot provide habitat for common amphibians such as the Pacific treefrog (*Pseudacris regilla*) and the nonnative bullfrog (*Lithobates catesbeianus*). Pacific treefrogs were also observed throughout the landscaped area using cones, wood pallets and other objects as cover. The agricultural Annex in the unfenced, northern portion of the installation also provides suitable foraging and resting habitat for reptiles and amphibians. During the 2012 surveys, a gopher snake (*Pitouphis catenifer catenifer*) was observed under railroad ties stacked along the edge of one of the fields.

Fish

No suitable habitat for fish is present on the Depot. There are no naturally occurring surface water resources, and surface water runoff from within the Depot is collected in drains that lead to the unlined stormwater detention pond located in the northwest corner of the Depot. No incidental observations of fish have been reported and surveys have not been conducted.

Birds

The retention basins along the northern edge of the depot are suitable foraging habitats for various waterfowl and shorebirds including mallard (*Anas platyrhynchos*), American avocet (*Recurvirostra americana*), red-winged blackbird (*Agelaius phoeniceus*), American coots (*Fulica americana*), green

heron (*Butorides virescens*), and great egret (*Ardea alba*). During surveys in 2012, great horned owls (*Bubo virginianus*) were observed nesting in trees in the landscaped park. Other birds also use these landscaped areas for foraging, cover, and possibly for nesting. The agricultural Annex in the unfenced, northern portion of the installation also provides suitable foraging and resting habitat for birds, as well as breeding habitat for burrowing owls (*Athene cunicularia*) as discussed in Section 4.6.3. Red-tailed hawks (*Buteo jamaicensis*), Swainson's hawks (*Buteo swainsoni*), and American kestrels (*Falco sparverius*) were observed hunting, as well as perching on trees throughout the fields. Many migratory birds also forage in this area, including California horned larks and western meadowlarks (*Sturnella neglecta*).

Mammals

The retention basins provide foraging habitat and a seasonal water source for bats. Other mammals such as the black-tailed jackrabbit (*Lepus californicus*) and desert cottontail (*Sylvilagus audubonii*) also use these landscaped areas for foraging and cover. The agricultural Annex in the unfenced, northern portion of the installation also provides suitable foraging and resting habitat for mammals; a coyote (*Canis latrans*) was observed in these fields. Biologists also observed Mexican free-tailed bats (*Tadarida brasiliensis*) and a Myotis species day roosting in the roofing of a structure on the Depot. During night surveys, Mexican free-tailed bats, Yuma myotis (*Myotis yumanensis*), big brown bats (*Eptesicus fuscus*), and pallid bats (*Antrozous pallidus*) were also observed.

4.6.3 Special Status Species

Special status species include species that are federally listed by USFWS as endangered, threatened, or candidates; California state-listed endangered, threatened, candidate, or species of special concern (SSC); birds on the Federal Birds of Conservation Concern list; and plants identified by the California Native Plant Society (CNPS) as rare or threatened. Raptors (i.e., hawks, falcons, kites, eagles, vultures and owls) are also considered special status animals because they are protected under state law (California Fish and Game Code, Sections 3503, 3503.5, 3505 and 3513, and California CFR, Title 14, §§ 251.1, 652 and 783-786.6). Migratory birds are protected species under the MBTA as discussed in Section 4.6.3.1.

The ESA (16 U.S.C. § 1531 et seq.) requires federal agencies to manage federally listed threatened and endangered species and their habitat in a manner that promotes conservation of those species and is consistent with species recovery plans. Section 7 of the ESA requires federal agencies to enter into consultation with USFWS when a proposed action may affect a listed threatened or endangered species. Under ESA, "take" of federally listed wildlife is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to do so. Harm includes the destruction of habitat.

32 CFR § 651 requires an environmental assessment for activities affecting federally-listed species. AR 200-1 mandates protection of species that are candidates for ESA listing and state-listed species, and installations are to avoid activities that would result in the listing of these species. Other special status species are considered in management planning to reduce the potential of their state or federal listing.

Fauna

No federally listed wildlife species have been observed; however, the San Joaquin kit fox (*Vulpes macrotis mutica*) is the most likely of the federally listed species to occur at Defense Distribution Depot San Joaquin. There are four CDFW SSC and one state-threatened bird species that have been documented within 5 miles of the Depot: burrowing owl (*Athene cunicularia*); California horned lark (*Eremophila alpestris actia*); Swainson's hawk; song sparrow (*Melospiza melodia*); and tricolored blackbird (*Agelaius tricolor*). As of September 2015, the tricolored blackbird is under review by the USFWS after a 90 day finding that formal listing on the ESA may be warranted. Two CDFW SSC mammals, one federal- and state-endangered mammal, and one federal-endangered and state-threatened mammal have been documented within 5 miles of the Depot: American badger (*Taxidea taxus*); riparian brush rabbit (*Sylvilagus bachmani riparius*); San Joaquin kit fox; and San Joaquin pocket mouse (*Perognathus inornatus inornatus*). Additionally, one federally and state-threatened amphibian, the California tiger salamander (*Ambystoma californiense*), and one CDFW SSC invertebrate, Sacramento anthicid beetle (*Anthicus sacramento*), have been documented within 5 miles of the Depot.

There are state-listed species, migratory birds, and plant species of concern at Defense Distribution Depot San Joaquin that are not provided species-specific management but are taken into consideration when developing land management actions and priorities.

Table 2 presents the special status animal and plant species that have been observed or have the potential to occur at Defense Distribution Depot San Joaquin.

Table 2. Special Status Species with the Potential to Occur on Defense Distribution Depot San Joaquin

Species	Status	Habitat	Observed on Site?	Comments
BIRDS				
Burrowing owl (*Athene cunicularia*)	CDFW SSC, BCC	Burrows around short vegetation with only sparse shrubs and taller vegetation. Along roadsides and water conveyance structures surrounded by crops.	Yes	One breeding pair observed in 2011; None observed in 2012; Observed in 2013 and 2014 nesting on the edge of the Annex; none observed nesting in 2015.
California horned lark (*Eremophila alpestris actia*)	CDFW SSC, PIF	Open grasslands, nesting in hollows on the ground.	Yes	Observed on Annex in medium sized flock, during April surveys.
Tricolored blackbird (*Agelaius tricolor*)	CDFW SSC, BCC, PIF	Cattails, bulrushes, Himalaya blackberry (*Rubus discolor*), and agricultural silage.	No	This species could potentially occur in or near open water, but needs consistent presence of water during nesting season.
Swainson's hawk (*Buteo swainsoni*)	ST	Permanent waterways with continuous canopy of trees and grassland understory near irrigated pasture, alfalfa or grainfields.	Yes	Observed in 2012 foraging at the Depot.

Table 2. Special Status Species with the Potential to Occur on Defense Distribution Depot San Joaquin

Species	Status	Habitat	Observed on Site?	Comments
Song sparrow - Modesto population (*Melospiza melodia*)	CDFW SSC	Moderately dense vegetation, a source of standing or running water, semi-open canopies, and exposed ground or leaf litter.	No	
MAMMALS				
American badger (*Taxidea taxus*)	CDFW SSC	Burrowing in friable soils. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats.	No	Usually avoids developed and agricultural areas, but has the potential to occur in the area.
Riparian brush rabbit (*Sylvilagus bachmani riparius*)	FE, SE	Dense brush and nearby openings associated with riparian areas.	No	Occurs almost exclusively on the banks of the Stanislaus and San Joaquin Rivers.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, ST	Semi-desert areas as well as arid and alkaline foothills.	No	Most likely to occur in dense brush or riparian areas; however, can occur in or near urban and agricultural areas, as well as grasslands.
San Joaquin pocket mouse (*Perognathus inornatus inornatus*)	CDFW SSC	Friable soils in grasslands and blue oak savannas.	No	No natural grasslands or oak savannas on the Depot.
AMPHIBIANS				
California tiger salamander (*Ambystoma californiense*) Central California DPS*	FT, ST	Grasslands, temporary pools (such as vernal pools or stock ponds) for successful reproduction.	No	This species occurs along the eastern edge of San Joaquin County in the Vernal Pool Zone and inter-digitated natural habitats of the Central Zone.
INVERTEBRATES				
Sacramento anthicid beetle (*Anthicus sacramento*)	CDFW SSC	Sand dunes along the lower Sacramento River.	No	Sand dunes are not present on the Depot.

Source: CNDDB 2015, DLA 2013b
Notes:
FE – Federally or state-listed endangered species
FT – Federally or state-listed threatened species
SE – State endangered
ST – State threatened
CDFW SSC – California Department of Fish and Wildlife Species of Special Concern
DPS – Distinct Population Segment
BCC – USFWS Bird of Conservation Concern
PIF – Partners in Flight Species of Continental Importance

San Joaquin Kit Fox

The San Joaquin kit fox was listed as a federally endangered species in 1967 (Federal Register 32:4001). A recovery plan was developed in 1993 and updated in 1998; the latest USFWS 5-Year Review was completed in 2010 (USFWS 1998; USFWS 2010). The San Joaquin kit fox has also been listed as a state threatened species in California since 1971. The Tracy area is near the northern most extent of its documented range within the San Joaquin Valley floor where fewer fox have been observed, suggesting a pattern of declining presence (USFWS 2010). No critical habitat has been designated for this species. Locally, the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan addresses County development as it relates to San Joaquin kit fox habitat (SJMSCP 2000).

The San Joaquin kit fox has an average size of 20 inches and weighs approximately 5 pounds. They have long legs, a black-tipped tail, white stomach, and large ears. They range in color from a tan to yellowish-grey. This slight fox is primarily nocturnal and utilizes subsurface dens. Its diet is comprised of small rodents, rabbits, hares, ground-nesting birds, and at times, insects.

Their home range can amount to thousands of acres depending on prey availability. The closest documented occurrence to the Depot is approximately 2 miles away (CNDDB 2015); therefore, the chance that the fox could use the Depot as a transient exists. The San Joaquin kit fox occurs in a variety of habitats such as subshrub scrub, oak woodland, grasslands, and agriculture (USFWS 2010). Habitat at the Depot that has the most potential for the fox includes the agricultural Annex as well as the small grassland remnants adjacent to the Annex. Most likely, the fox would be passing through the Depot on the way to more suitable habitat or in an effort to use the area for foraging; however, agricultural lands provide suboptimal foraging habitat for the kit fox when not adjacent to optimal habitat (Clark et al. 2005; Cypher et al. 2005; Warrick et al. 2007; USFWS 2010).

Conversion of suitable habitat to agriculture is the primary cause of habitat loss for the San Joaquin kit fox in the San Joaquin Valley (Cypher et al. 2007). However, infrequent irrigation and limited use of chemicals and pesticides could increase suitability of agricultural habitat depending on the size of the parcel, existing habitat conditions, availability of existing prey, and proximity to kit fox occurrence (Cypher 2006; USFWS 2010). No formal surveys for the San Joaquin kit fox have been conducted at the Defense Distribution Depot San Joaquin but due to the close proximity of a documented kit fox occurrence (2 miles), surveys are recommended (see Section 5.2.1). Survey protocols (USFWS 1999), standardized recommendations for protection prior to or during ground disturbance, and a habitat evaluation form (USFWS 2001) are available on the CDFW survey and monitoring protocols and guidelines website.

Burrowing Owl

Burrowing owls are a CDFW SSC that have been documented on the Defense Distribution Depot San Joaquin Annex in past surveys (DLA 2011b). The western burrowing owl inhabits open grasslands and shrublands in the Central Valley, coastal regions, and deserts of California (see Photograph 3). They live and breed in burrows created by badgers and ground squirrels. They occur in a patchy distribution throughout San Joaquin County, but recent studies have shown a decline of more than 50 percent in the number of breeding pairs in the Central Valley (SJMSCP 2000).

This species is protected under the MBTA and is a CDFW Species of Special Concern, which is a species that has declining population levels, limited ranges, and/or continuing threats making them

vulnerable to extinction. There is concern that the burrowing owl could become a federally listed species; therefore, proactive conservation actions are recommended to support burrowing owls in the region in order to avoid the potential for listing.

In June 2011, two adult burrowing owls and up to five juveniles were observed on the Annex. These burrowing owls were utilizing a natural burrow at one of the water catchment basins along Banta Road. Adjacent land use consisted of recently tilled and flooded agricultural fields, resulting in minimal to short vegetation during the time of these observations. Additional surveys were conducted in 2012, 2013, and 2015; however, adjacent vegetation to the previously documented burrow was overgrown and burrowing owls were not observed during these surveys (DLA 2011b, DLA 2013b, DLA 2013c; DLA 2015). The Depot has subsequently reported incidental observations of burrowing owls at the Annex.

Photograph 3. Burrowing Owls in San Joaquin County

Migratory Birds

Migratory birds are a diverse group, relying on a wide range of habitats during their breeding and non-breeding seasons and during migration. Effective bird conservation necessitates coordinated efforts that improve habitats and contribute to the overall health of ecosystems. Given the vast geographic ranges of migratory birds, the variety of species, and the incomplete knowledge of their life cycle requirements, conservation partnerships spanning geopolitical and taxonomic boundaries are critical to the success of migratory bird conservation efforts (DOD PIF 2009).

The MBTA protects migratory birds and implements the United States' commitment to international conventions for the protection of migratory birds. The MBTA is the domestic law that governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. The Depot is subject to the provisions of the MBTA, statutory and regulatory requirements associated with the Migratory Bird Permits, Take of Migratory Birds by the Armed Forces (DOD/MBTA rule; 72 Federal Register 8931), and the Memorandum of Understanding between DOD and USFWS to Promote the Conservation of Migratory Birds (71 Federal Register 51580). If the

DOD determines that a proposed or ongoing military readiness activity could result in a significant adverse effect on a population of a migratory bird species, then coordination must occur with USFWS to develop appropriate and reasonable conservation measures to minimize or mitigate such potential adverse effects (see 72 Federal Register 8931).

Additionally, Executive Order (EO) 13186, Conservation of Migratory Birds (January 10, 2001), requires the support of various conservation planning efforts already in progress; the incorporation of bird conservation considerations into agency planning, including NEPA analyses; and on the annual reporting of the level of take of migratory birds. Birds of Conservation Concern are a subset of protected birds under the MBTA and include all species, subspecies, and populations of migratory nongame birds that are likely to become candidates for listing under the ESA without additional conservation actions (USFWS 2008). Birds of Conservation Concern that have the potential to occur on Defense Distribution Depot San Joaquin are shown in Table 3.

Table 3. USFWS Birds of Conservation Concern with the Potential to Occur on Defense Distribution Depot San Joaquin

Common Name	Scientific Name	Habitat	Observed on Site?
Bald eagle	*Haliaeetus leucocephalus*	year-round	No
Black rail	*Laterallus jamaicensis*	breeding	No
Burrowing owl	*Athene cunicularia*	year-round	Yes
California spotted owl*	*Strix occidentalis*	year-round	No
Costa's hummingbird	*Calypte costae*	breeding	No
Fox sparrow	*Passerella iliaca*	wintering	No
Lawrence's goldfinch	*Carduelis lawrencei*	breeding	No
Least bittern	*Ixobrychus exilis*	breeding	No
Lesser yellowlegs	*Tringa flavipes*	wintering	No
Lewis's woodpecker*	*Melanerpes lewis*	wintering	No
Loggerhead shrike	*Lanius ludovicianus*	year-round	Yes
Long-billed curlew	*Numenius americanus*	wintering	No
Marbled godwit	*Limosa fedoa*	wintering	No
Mountain plover	*Charadrius montanus*	wintering	No
Nuttall's woodpecker	*Picoides nuttallii*	year-round	No
Oak titmouse*	*Baeolophus inornatus*	year-round	No
Peregrine falcon	*Falco peregrinus*	year-round	No
Short-billed dowitcher	*Limnodromus griseus*	wintering	No

Table 3. USFWS Birds of Conservation Concern with the Potential to Occur on Defense Distribution Depot San Joaquin

Common Name	Scientific Name	Habitat	Observed on Site?
Short-eared owl	*Asio flammeus*	wintering	No
Swainson's hawk	*Buteo swainsoni*	wintering	Yes
Tricolored blackbird*	*Agelaius tricolor*	year-round	No
Yellow-billed magpie*	*Pica nuttalli*	year-round	No

Source: IPaC 2015; * Partners In Flight Watch List

Partners in Flight

Partners in Flight (PIF) is a network of more than 150 partner organizations engaged in all aspects of landbird conservation. Most recently, PIF published an update to the North American Landbird Conservation Plan (Rich et al. 2004; Rosenburg et al. 2016). The 2016 update refines and updates the relative vulnerability assessments and resulting Watch List that identifies the species of highest conservation concern. The Watch List, which provides rankings and descriptions of factors for vulnerability for each species, fosters proactive management towards the most vulnerable bird species. The Depot falls within two networks organized to facilitate cooperation of partner organizations: the Central Valley Joint Venture and the DOD Partners in Flight program.

The Central Valley Joint Venture includes waterfowl, shorebirds, and landbirds while covering a broad range of habitats. The Joint Venture focuses on a goal of restoring ecosystems that are capable of supporting self-sustaining and resilient landbird populations. As such, this partnership has developed a list of focal species. Five species that are on that list are also listed on the USFWS Birds of Conservation Concern, denoted by an asterisk in Table 3 above.

The DOD Partners in Flight (PIF) program consists of a cooperative network of natural resources personnel and others that spans across U.S. military installations, and links with partners throughout the Americas. DOD PIF supports and enhances the military mission by providing a focused and coordinated approach for the conservation of resident and migratory birds and their habitats on DOD lands dealing with all bird species, including migratory, resident, game, and non-game birds. Specifically, DOD PIF develops cooperative agreements for implementing bird conservation programs and projects on military lands, facilitates communication and information sharing across geographic and political boundaries, participates and provides leadership in PIF committees and working groups, and provides military natural resources professionals with the most up-to-date information on bird conservation (DOD PIF 2009).

DOD PIF sustains and enhances readiness through proactive, habitat-based conservation and management strategies that maintain healthy landscapes and training lands. DOD PIF works beyond installation boundaries to facilitate cooperative partnerships, determine the current status of migratory birds, and prevent the listing of additional birds as threatened or endangered. DOD PIF provides a scientific basis for maximizing the effectiveness of resource management, enhancing the

biological integrity of DOD lands, and ensuring continued use of these lands to fulfill military training requirements. Participating in partnerships, such as PIF, also helps DOD to meet its trust responsibility to conserve our nation's biodiversity more effectively (DOD PIF 2009).

For further information on the DOD Partners in Flight program, go to *http://www.DODpif.org*.

The DOD Partners in Amphibian and Reptile Conservation provides a framework for DOD installation to use to effectively manage amphibians and reptiles on DOD lands by focusing on habitat and species management; inventory, research, monitoring; and education, outreach, and training (Lovich et al. 2015).

For further information on the DOD Partners in Amphibian and Reptile Conservation program, go to http://www.dodnaturalresources.net/DoD-PARC.html.

Flora

According to the California Natural Diversity Database, there are no federally listed threatened or endangered plant species and six special status plant species that have been documented within five miles of the Depot (CNDDB 2015). The CNPS has a ranking system for special status plants. Plants with a rank of 1A are presumed extinct because they have not been seen or collected in the wild in California in many years. This rank includes plants that are both presumed extinct as well as those plants which are presumed extirpated in California. There are no plant occurrences ranked as 1A within 5 miles of the Depot. Plants with a rank of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All of the plants constituting rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 of the CDFW Code, and are eligible for state listing (DLA 2013b).

There are five plant species ranked as 1B that have been documented within 5 miles of the Depot: big tarplant (*Blepharizonia plumosa*); caper-fruited tropidocarpum (T*ropidocarpum capparideum)*; Delta button celery (*Eryngium racemosum*); round-leaved filaree (*Californica macrophylla*); and slough thistle (*Cirsium crassicaule*). Except for being common beyond the boundaries of California, plants with a rank of 2 would have been ranked 1B. From the federal perspective, plants common in other states or countries were not eligible for consideration under the provisions of the ESA until 1979. However, after the passage of the Native Plant Protection Act in 1979, plants were considered for protection without regard to their distribution outside the state. There is one species, Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), occurrence ranked as 2 within 5 miles of the Depot. Added to the ranks of CNPS 1A, 1B, and 2 there is a threat rank. The CNPS Threat Rank is an extension added onto the above described rare plant ranks and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered (seriously threatened in California) and 3 being the least endangered (not very threatened in California). Table 4 depicts both the rare plant ranks and the threat rank for special status plants occurrences within 5 miles of the Depot (CNDDB 2015).

4.6.4 Wetlands

The USACE defines wetlands as "those areas that are inundated or saturated with ground or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands

generally include swamps, marshes, bogs, and similar areas" (33 CFR § 328). Wetlands are special aquatic sites that have a high resource value.

There is a percolation/evaporation pond on site that supports wetland vegetation (see Photograph 4) and exhibits the structure and function of a wetland. Surface water runoff from the entire Depot is collected into a stormwater drainage system and transported to this unlined holding pond in the northern corner of the site. Water in the pond evaporates or percolates downward into the soil. If inflows exceed the capacity of the pond, excess water is pumped to a local drainage ditch that ultimately drains into the San Joaquin River, 4.5 miles northeast of the site (DLA 2013b).

Table 4. Special Status Plant Species that Occur Near Defense Distribution Depot San Joaquin

Species	Status/ CNPS Rank	Habitat	Observed on Site?	Comments
Big tarplant (*Blepharizonia plumosa*)	1B.1	Valley grasslands, foothill woodlands, and chaparral	No	Occurrence near Tracy Airport 2.5 miles from the Depot. No suitable habitat on Depot.
Caper-fruited tropidocarpum (*Tropidocarpum capparideum*)	1B.1	Valley grasslands	No	No suitable undisturbed grassland habitat on the Depot.
Delta button celery (*Eryngium racemosum*)	SE,1B.1	Vernally mesic clay depressions, riparian scrub	No	No suitable habitat on the Depot.
Round-leaved filaree (*Californica macrophylla*)	1B.1	Valley grasslands and woodland foothills	No	Occurrence near City of Tracy. No native grasslands or woodlands on the Depot.
Slough thistle (*Cirsium crassicaule*)	1B.1	Marshes, swamps and riparian-scrub areas, and chenopod scrub	No	Occurrence near Lathrop. No suitable habitat on the Depot.
Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*)	2.1	Riparian areas, meadows, marshes, and vernal pools	No	No suitable habitat on the Depot.

Source: CNDDB 2015

Photograph 4. Seasonally Inundated Retention Pond at Defense Distribution Depot San Joaquin

The Sacramento District of USACE provided a determination in 1996 for the Depot that there are no wetlands regulated under Section 404 of the CWA on the Depot. The stormwater basin was examined and because “this basin was excavated in uplands and it has artificial hydrology in that stormwater is pumped into the basin, this area is not a jurisdictional water of the United States” (DLA 1999). If the basin is abandoned in the future, any portion of the basin that retains wetland characteristics then could be considered a jurisdictional wetland or water of the United States.

In the regional areas outside the Depot, vernal pools and other seasonal wetlands in the San Joaquin Valley provide important foraging and breeding habitat and cover for wetland wildlife and invertebrates. These ephemeral wetlands also support highly specialized plant taxa adapted to growing conditions associated with seasonal and year-to-year variation in water availability. In the San Joaquin Valley, vernal pools support listed species. These are shallow ephemeral water bodies found in depressions among grasslands that can include vernal pools, vernal swale wetlands, and depressional seasonal wetlands. No vernal pool grasslands occur on the Depot, and wetted surfaces or pools likely to support vernal pool species were not observed during surveys of the site (DLA 2013b).

4.6.5 Invasive, Nonnative, Nuisance and Pest Species

Integrated pest management is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. Federal agencies are mandated to use integrated pest management by Public Law (Section 136r-l of title 7, U.S.C.). The IPMP is a guide to reduce reliance on pesticides and to enhance environmental protection; it reflects current DOD and DA policies, procedures, and standards and incorporates the requirements of USEPA and the State of California. The IPMP for Defense

Distribution Depot San Joaquin (DLA 2016) describes program elements including health and environmental safety; pest identification; pest management; and pesticide storage, transportation, use, and disposal. The lessee of the Annex is responsible for pest management controls on the leased agricultural land, which include appropriate state certification and reporting of pesticide use.

Invasive Fauna

There is a well-established population of feral cats that are located at the large water retention basin in the northwest corner of the Depot. These cats likely have a negative impact on migratory bird species to include songbirds and waterbirds. The location in which the cats reside is the most biologically diverse sites on the Depot. It provides nesting habitat and a seasonal water source for many species – all of which have the potential to be impacted by predation of the feral cats.

Invasive Flora

Invasive species can threaten the health of an ecosystem through competition and predation of native species. There are a number of noxious weeds that are of particular concern to the Depot. In 2006, the California Invasive Plant Council (Cal-IPC) updated the 1999 Exotic Pest Plants of Greatest Ecological Concern in California inventory list. The updated Cal-IPC inventory ranks invasive species using a High, Moderate, Limited, or Evaluated but not listed scale based on ecological impact of the species (Cal-IPC 2006). The Federal Noxious Weed Act of 1974 requires each federal agency to develop a management program to control noxious weeds on Federal lands under the agency's jurisdiction. EO 13112, *Invasive Species*, requires all Federal agencies to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause. The Presidential Memorandum, *Creating a Federal Strategy to Promote the Health of Honey Bee and other Pollinators* (June 2014), directs the DOD to support habitat restoration for pollinators with the use of pollinator-friendly native landscaping and minimize the use of pesticides harmful to pollinators through integrated management practices. Although most of the noxious weeds identified on the Depot are annual species, corrective action may be necessary to manage the spread of certain species.

Based on the 2012 biological survey (DLA 2013b), 31 plants listed in the Cal-IPC inventory (Cal-IPC 2006) were identified on the Depot (Table 5). Based on the ranking system described above, three weeds ranked in the high risk category: giant reed, yellow starthistle and perennial pepperweed *(Lepidium latifolium*). Additionally, 14 species ranked as moderate risks and 14 weeds ranked as limited risk were observed on the site. Most of these noxious weeds are dispersed and occur in small numbers primarily in isolated nonnative annual grassland patches and bare areas (DLA 2013b). One of the high-ranked species, giant reed, only occurs in the eastern corner of the installation in a small, isolated tract bounded by railroad tracks and the exterior side of the Depot fence.

Table 5. Invasive and Nonnative Plants Observed on Defense Distribution Depot San Joaquin

Common Name	Scientific Name	Cal-IPC Rank
Giant reed	*Arundo donax*	High
Yellow starthistle	*Centaurea solstitialis*	High
Perennial pepperweed	*Lepidium latifolium*	High
Tree-of-heaven	*Ailanthus altissima*	Moderate
Australian saltbush	*Atriplex semibaccata*	Moderate
Slender wild oat	*Avena barbata*	Moderate
Wild oat	*Avena fatua*	Moderate
Ripgut brome	*Bromus diandrus*	Moderate
Canada thistle	*Cirsium arvense*	Moderate
Bull thistle	*Cirsium vulgare*	Moderate
Bermudagrass	*Cynodon dactylon*	Moderate
Tasmanian blue gum	*Eucalyptus globulus*	Moderate
Shortpod mustard	*Hirschfeldia incana*	Moderate
Seaside barley	*Hordeum marinum*	Moderate
Italian ryegrass	*Lolium perenne L. ssp. multiflorum*	Moderate
London rocket	*Sisymbrium irio*	Moderate
Washington palm	*Washingtonia robusta*	Moderate
Field mustard	*Brassica rapa*	Limited
Soft brome	*Bromus hordeaceus*	Limited
Redstem filaree	*Erodium cicutarium*	Limited
California burclover	*Medicago polymorpha*	Limited
Olive	*Olea europaea*	Limited
Bristly oxtongue	*Picris echioides*	Limited
Narrow leaf plantain	*Plantago lanceolata*	Limited
Rabbitfoot polypogon	*Polypogon monspeliensis*	Limited
Cherry plum	*Prunus cerasifera*	Limited

Table 5. Invasive and Nonnative Plants Observed on Defense Distribution Depot San Joaquin

Common Name	Scientific Name	Cal-IPC Rank
Black locust	*Robinia pseudoacacia*	Limited
Curly dock	*Rumex crispus*	Limited
Russian thistle	*Salsola tragus*	Limited
Peruvian peppertree	*Schinus molle*	Limited
Blessed milkthistle	*Silybum marianum*	Limited

Source: DLA 2013b, USDA 1999, Cal-IPC 2006

Another one of the high-ranked species, yellow starthistle, was documented as abundant on the Depot during both the 1999 and 2012 biological surveys. The most obvious locations that yellow starthistle is abundant are in the stormwater retention basin in the northern area of the Depot and other small areas that are not mowed or sprayed with herbicide on a regular basis; however, signs of this species exist in every portion of the Depot and in isolated areas of the Annex. Unfortunately, the yellow starthistle poses a serious threat to the biological diversity of California's grasslands (DLA 1999). Due to the yellow starthistle's high threat ranking and its documented abundance on the Depot, this species is discussed in detail below.

Yellow Starthistle

Yellow starthistle (see Photograph 5) is a noxious nonnative annual/biennial member of the aster (Asteraceae) family of flowering plants that originates from the eastern Mediterranean and will often form monocultures. It has long yellow spines extending from the yellow composite flower head. It grows to a height of 2 to 3 feet and is well-branched, but it can also persist and flower in a mowed area at approximately 1 inch in height. In addition to being ranked by Cal-IPC has a high threat, this plant has a California Department of Food and Agriculture rating of A, meaning that it is an organism of known economic importance subject to state-enforced action involving eradication, quarantine, containment, rejection, or other holding action. It has a combination of growth patterns and survival mechanisms that have allowed it to infest millions of acres in California and it is spreading at an estimated rate of 50 to 100 acres a year.

Photograph 5. Yellow Starthistle on Defense Distribution Depot San Joaquin

Yellow starthistle produces a tremendous crop of seeds that germinate during autumn and winter rains. The dense carpet of basal rosettes and the tall standing dry matter produced during the previous growing season work together to exclude many native spring flowering plants. During the spring, yellow starthistle sends down deep roots that will allow it to survive and flower throughout dry summer months, thus also displacing native summer growing plants. In late spring (May–June), plants send up persistent, tall, multi-branched flower stalks. Numerous flowering heads that develop can produce thousands of seeds. Once reaching the soil, seeds can remain viable for 10 years or more if buried. Effective control programs aim to destroy yellow starthistle plants before they can release their seed crop and add to the soil seed bank.

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5 Management Concerns, Objectives, and Actions

Management objectives established in this INRMP were developed through a thorough evaluation of the natural resources present at Defense Distribution Depot San Joaquin. A number of items have been identified in subject areas that affect the natural resources present on and immediately adjacent to Defense Distribution Depot San Joaquin. The purpose of this section is to identify actions and objectives for Defense Distribution Depot San Joaquin and to obtain workable and useful solutions for each item identified.

Specific concerns, objectives, and actions were developed to meet the overriding goals for natural resources managed on the Defense Distribution Depot San Joaquin (see Table 6). A summary of the management actions and the estimated timeframe for completion is presented in Appendix C.

Table 6. Summary of INRMP Goals

Ecosystem Management (ECO) Goals
• Manage Defense Distribution Depot San Joaquin based on a regional ecosystem approach that conserves biodiversity. • Identify natural resources and operational actions that compromise the function and composition of ecosystems and develop remedies through adaptive management. • Implement management strategies with consideration of ecological units and timeframes. • Support sustainable, multiple-use human activities. • Apply ecosystem-based management through implementation of the INRMP and other installation plans and programs.
Threatened, Endangered, and Species of Concern (TES) Goals
• Manage Defense Distribution Depot San Joaquin on a regional ecosystem-based approach that manages sensitive species and their associated ecosystems while protecting the operational functionality of the military missions. • Ensure that Defense Distribution Depot San Joaquin remains in compliance with the ESA and appropriate state regulations. • Promote natural resources and ecosystem management in the local region that benefits the functionality of the ecosystems. • Protect sensitive wildlife habitats on Defense Distribution Depot San Joaquin.
Wetlands and Waters of the United States (WT) Goals
• Remain in compliance with USACE and State of California wetlands regulations. • Minimize the operational impact of Defense Distribution Depot San Joaquin missions on wetland vegetation in retention pond.
Watershed Management (WM) Goals
• Reduce/control nutrient and sediment inputs into the watershed that degrade water quality. • Minimize nonpoint source pollution of surface water in the watershed through the implementation of BMPs. • Maintain vegetation buffers on waterways/riparian corridors.

Table 6. Summary of INRMP Goals

Fish and Wildlife Management (FW) Goals
• Manage based on an ecosystem management approach, rather than a single-species paradigm. • Employ a systematic approach to managing wildlife resources, using a process that includes inventory, monitoring, modeling, management, assessment, and evaluation. • Minimize wildlife-related health risks, safety risks, and environmental damage. • Maintain diversity of wildlife in areas on the installation where there will be no conflict with the mission. • Maintain and involve partnerships with agencies and groups involved in wildlife management.
Habitat Management (HM) Goals
• Enhance habitat by providing suitable food and cover for native species while protecting the operational functionality of Defense Distribution Depot San Joaquin's missions. • Protect native habitat diversity. • Enhance habitat for native species by removing invasive vegetation.
Exotic and Invasive Species Management (INV) Goals
• Ensure compliance with environmental legislation, regulations, and guidelines. • Control pests and invasive species.
Grounds Maintenance (GM) Goals
• Lessen or avoid adverse effects from project activities on the overall ecosystem and its sensitive resources. • Make maximum use of regional, native plant species and avoid introduction of invasive, exotic species in revegetation and landscaping activities. • Reduce maintenance inputs in terms of energy, water, manpower, and equipment.
Agricultural Outleasing (AG) Goals
• Balance production on agricultural lands with long-term health and functionality of the soils. • Ensure outlease terms provide ecological benefits where possible and support installation natural resources program management.
Outdoor Recreation (OR) Goals
• Provide outdoor recreation experiences while sustaining ecosystem integrity. • Ensure that outdoor recreation activities are not in conflict with mission priorities.
Environmental Awareness, Education, and Outreach (EDU) Goals
• Provide education opportunities to military personnel. • Promote environmental stewardship through training and awareness.
Surrounding Lands (SR) Goals
• Coordinate with surrounding landowners on ecosystem-based management of resources and encourage cooperative efforts on adjacent lands that are complementary to the INRMP. • Minimize threats to Defense Distribution Depot San Joaquin assets and natural resources from off-site land use.

5.1 Ecosystem Management (ECO)

It is the goal of ecosystem management at Defense Distribution Depot San Joaquin to conserve biodiversity by managing the ecosystem rather than focusing on a single biotic or abiotic component of the ecosystem. Ecosystem-focused management encompasses both the function and the structure of the ecosystem and the processes that link them. Additionally, DODI 4715.03 states that DOD Components shall assess installation lands for forestry and agricultural outlease suitability. Any such uses shall support the military mission and be addressed in the INRMP, and shall be consistent with long-term ecosystem-based management goals that place ecological sustainability objectives

above revenue optimization goals (DOD 2011). The ecosystem management issues and associated objectives and actions are presented as follows.

5.1.1 ECO-1. Develop an Ecosystem Vision for the Installation

Concern: There is an ongoing need for coordination between Defense Distribution Depot San Joaquin and other agencies; and between interested and affected public entities during plan development and implementation to manage the ecosystem effectively.

Objective: Develop an ecosystem vision for Defense Distribution Depot San Joaquin that can be relayed during communication with other agencies and public entities to ensure that the installation's ecosystem management approach is understood.

Actions:

1. Complete this version of the INRMP and use it as a beginning point to develop an ecosystem management approach to natural resources management.
2. As needed, develop a process and schedule for coordinating with agencies to allow for agency comment on management plans.

5.1.2 ECO-2: Ecosystem Management of Defense Distribution Depot San Joaquin and Mission Requirements

Concern: Conceptually, ecosystem management is an appropriate strategy for managing installation natural resources. Pragmatically, the approach is not currently defined well enough to develop an integrated management plan that will guide natural resources management. Additionally, the small contribution of the Defense Distribution Depot San Joaquin to regional ecosystems are not well understood across time and across large geographic areas.

Objective: Develop an effective natural resources management approach that integrates all ecological components into a comprehensive management program.

Actions:

1. Foster landscape-scale thinking among installation staff and provide them with appropriate training if needed.
2. Implement actions, once plans are developed or revised, identified in the INRMP.

5.2 Threatened, Endangered, and Species of Concern (TES)

An installation's overall ecosystem management strategy must provide for protection and recovery of threatened and endangered species. Under the ESA, an "endangered species" is defined as any species that is in danger of extinction throughout all or a significant portion of its range. A "threatened species" is defined as any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Species of concern include federally listed candidate species; state-listed threatened or endangered, candidate, or species of concern; migratory birds; and birds listed on the Birds of Conservation Concern list. USFWS has

also presented a list of species that are regarded as candidates for possible listing under the ESA. Although candidate species receive no statutory protection under the ESA, the USFWS believes it is important to advise government agencies, industry, and the public that these species are at risk and could warrant protection under the Act.

General management actions for listed species include the following:

- Prepare and implement specific management actions for listed species that include protocols for monitoring surveys and for site marking of sensitive areas.
- Implement Environmental Review requirements in accordance with AR 200-1.
- Conduct Environmental Awareness briefings as necessary.
- Perform minimization and conservation measures aimed at reducing the potential for accidental take.
- Investigate and implement research projects to better understand the ecological requirements of listed and species of concern.
- Investigate and implement habitat improvement and nonnative species control to conserve listed species.

If threatened, endangered, or species of concern are discovered on the installation during a biotic inventory, species information and management actions should be incorporated into the INRMP. Figure 5 presents an endangered species coordination decision chart that should be used as part of the planning process for projects that could impact known or potential future populations of threatened or endangered species on the installation.

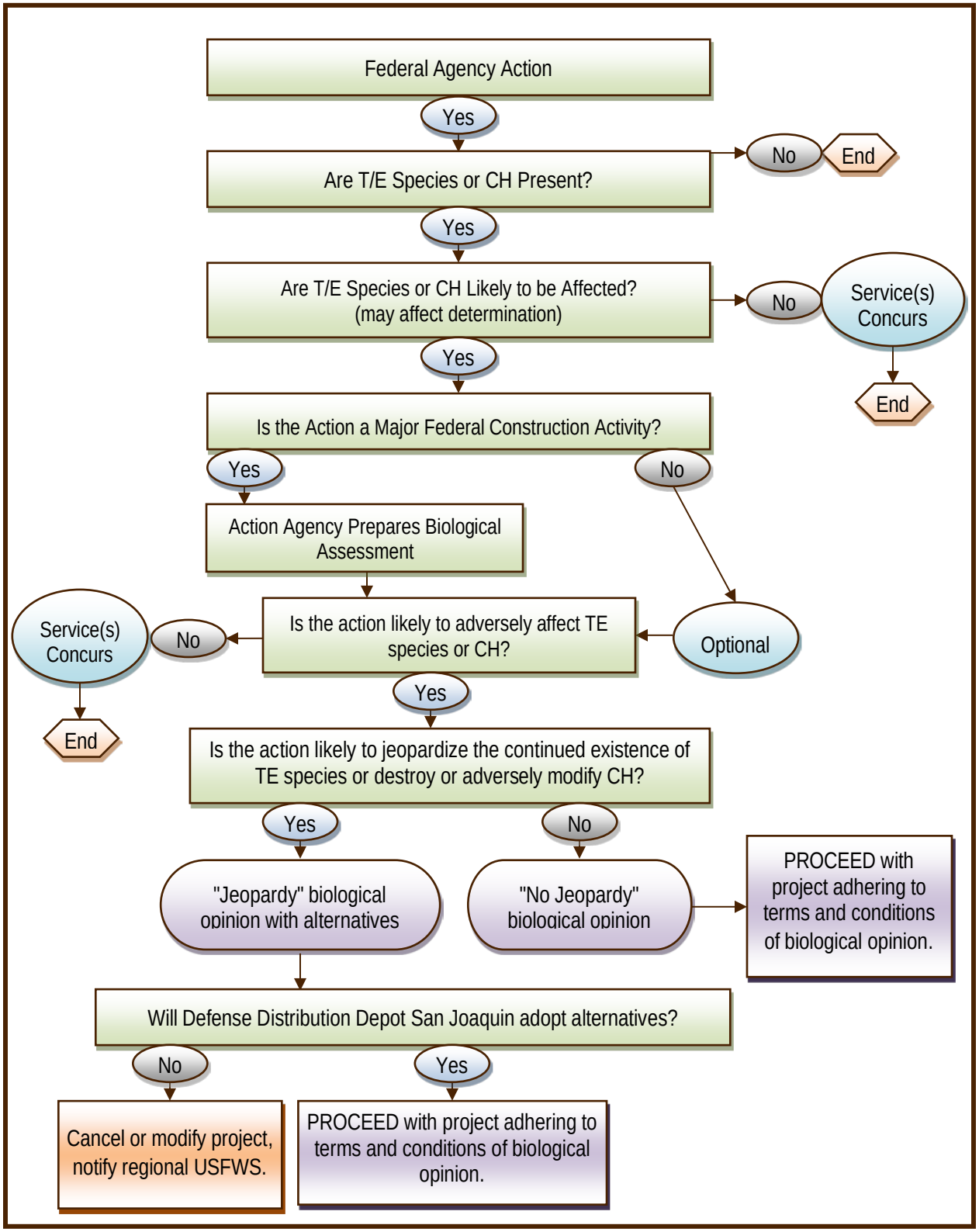
The goal of this section is to manage Defense Distribution Depot San Joaquin on a regional ecosystem-based approach that manages threatened, endangered, and species of concern while protecting the operational functionality of the mission. While single-species management is not promoted as a general philosophical management approach on the installation, specific controls are used to protect threatened, endangered, and species of concern beyond management of the ecosystem. The threatened and endangered species and critical habitats topics of concern and associated objectives and actions are presented as follows.

5.2.1 TES-1: Federal- and State-Listed Species Management

Concern: There are no federal-listed species that are known to reside on Defense Distribution Depot San Joaquin. Should federal-listed species occur on the installation, the installation will meet requirements under the ESA by providing adequate management or protection and by modifying this INRMP accordingly. There are three state-listed species that have been documented on the installation.

Objective: Confirm the presence or absence of threatened and endangered species and species of concern.

Figure 5. Federally Listed Species Coordination



T/E = threatened or endangered; CH = designated critical habitat; BA = Biological Assessment

Actions:

1. Continue to conduct floristic and fauna surveys at established intervals (every 5 years) to determine any changes to the state of federally listed plants/animals located on the installation. If a candidate, threatened, or endangered species is discovered, management actions will be developed and incorporated into this INRMP to fulfill the requirements of the ESA and state legislation (i.e., to provide adequate management or protection).
2. Maintain a list of special status plant and animal species with the potential to occur at Defense Distribution Depot San Joaquin (see list in Table 2).
3. If listed species are found, or if species already known on the installation become listed, modify this INRMP for adequate management or protection of the species.
4. Consider conducting remote sensing (e.g., trail cameras) surveys for the San Joaquin kit fox. Coordinate with USFWS to determine whether a reimbursable agreement for the surveys could be developed (see Section 5.5.3, Action 3).

5.2.2 TES-2: Special Status Species Habitat Protection

Objective: Maintain habitats for special status species, such as riparian areas and grasslands, in the limited areas available.

Actions:

1. Continue monitoring special status species as described in this INRMP and adapt monitoring and management actions as needed. Use monitoring information and other information gleaned to guide adaptive management.
2. Initiate habitat improvement projects to conserve biodiversity and protect plant and animal habitats, as funding is available and when such projects will not adversely affect the military mission (e.g., limited habitat disturbance where such disturbance will promote native plant growth, preventing habitat disturbance when this will promote native plant growth, and revegetation with native plants).
3. Periodically review the natural resources management program to ensure that management actions do not adversely impact species of concern habitat.

5.2.3 TES-3: Special Status Species Awareness

Concern: Mission activities might impact these species of concern, as installation staff, tenants, and leasees might not be aware of how to identify and avoid these species.

Objective: Minimize the potential for adverse effect on special status species from installation activities.

Actions:

1. Implement species-specific and overall conservation and monitoring measures described in this INRMP and those developed in future biological opinions.

2. Develop special status species identification sheets for distribution to installation personnel. Provide information on how to avoid impacting these species.
3. Continue use of the established Environmental Review process to identify actions that result in adverse effects on special status species or habitats. Coordinate measures with the proponent to reduce adverse effects.
4. Provide an environmental coordination map, which includes the following information:
    a. Regulated areas in which activity restrictions are in place.
    b. Special status species locations where pre-planning efforts might be necessary.

5.2.4 TES-4: Burrowing Owl Management

Concern: Mission activities might impact the burrowing owl, as installation staff might not be aware of how to identify and avoid this species and its habitat.

Objective: Minimize the potential for adverse effect on burrowing owls from installation activities and maintain habitats, such as roadside berms and water conveyance structures adjacent to agricultural fields within the Annex. Management actions have been adopted from the Burrowing Owl Management Plan previously developed for the Sharpe Site (DLA 1997) and the California Department of Fish and Wildlife *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) in addition to specific input from USFWS and CDFW on this plan.

Actions:

1. Implement annual breeding season census surveys for burrowing owls throughout the installation.
2. Implement pre-construction mitigation measures within suitable burrowing owl habitat including: pre-activity surveys; passive relocation of burrowing owls from construction zones; mitigating impacts to occupied burrows; installing and maintaining artificial burrows; mitigating impacts to unoccupied burrows; and mitigating impacts to foraging habitat.
3. Avoid disturbing occupied burrows during the nesting period (1 February through 31 August) and avoid impacting burrows occupied during the non-breeding season by resident burrowing owls. Avoid direct destruction of burrows through chaining, disking, cultivation, and urban, industrial, or agricultural development. Place visible markers near burrows to ensure that farm equipment and other machinery do not collapse burrows.
4. Outside of the nesting period (1 February through 31 August), mow areas that support borrowing owls to prevent invasive plants from reaching a height of approximately 5 inches.
5. Develop and implement worker awareness program to increase the on-site worker's recognition and commitment to burrowing owl protection. Ensure agricultural outlease terms include these BMPs for protection of the species and maintenance of habitat as compatible with agricultural uses.
6. Avoid fumigation of any animal burrows. Do not use treated bait or other means of poisoning nuisance animals in areas where burrowing owls are known or suspected to occur (e.g., sites observed with nesting owls, foraging habitat). Restrict the use of treated grain to poison mammals in areas outside of burrowing owl habitat, only apply during the month of January,

and use only when integrated pest management options are not effective (e.g., mechanical). Broadcast baiting is not permitted; if use of treated grain is necessary, use bait stations and only place stations outside of occupied burrowing owl habitat.

7. Conduct a biological feasibility study to explore the potential for setting aside a portion of the agricultural annex for burrowing owl habitat. This study should include an assessment of current and past inhabited areas on the annex, short and long-term recommendations for managing or restoring those areas to suitable habitat conditions, and an analysis of the appropriate size and configuration of land that would be biologically meaningful for burrowing owl conservation.
8. Conduct a logistical and financial feasibility study to determine the potential for setting aside a portion of the agricultural annex for burrowing owl habitat conservation (e.g., agricultural lease renewal schedules, potential mission impacts, integration with the Installation Master Plan).
9. Ensure collaboration with CDFW and USFWS regarding burrowing owl habitat management planning during the annual INRMP review.
10. In order to facilitate habitat for burrowing owls, proactively manage for the presence of ground squirrels when not in conflict with the military mission.

5.3 Wetlands and Waters of the United States (WT)

Wetland management strategies vary depending primarily on the wetland classification, which is determined by the value of a particular wetland area. A wetland's value is decided by the quality of the functions it provides, including its biomass production, habitat, erosion control, storm water storage, water quality protection, aquifer recharge potential, and low flow augmentation. Wetland complexes should be managed to benefit various bird and mammal species.

There are no known wetlands regulated under Section 404 of the Clean Water Act on the Depot, as determined by the USACE Sacramento District-conducted jurisdictional determination in 1996. There are three percolation/evaporation ponds on site that support wetland vegetation. Should any of those ponds be abandoned in the future, they may then be considered jurisdictional if they retain wetland characteristics (DLA 1999). Objectives and management actions for wetlands, waters of the United States, and floodplain protection are as follows.

5.3.1 WT-1: Wetland Vegetation Management

Concern: A determination was completed in 1996, and no jurisdictional wetlands or waters of the United State are located on the Depot; however, three onsite percolation/evaporation ponds support wetland vegetation.

Objective: Maintain and prevent damage of native wetland vegetation on Defense Distribution Depot San Joaquin to provide habitat for bird and mammal wetland associated species. Maintain native wetland vegetation in coordination with efforts to remove excess and non-native vegetation for percolation/evaporation pond effectiveness.

Actions:

1. Conduct Environmental Review for activities that could affect percolation/evaporation ponds.

2. Plan development activities to avoid native wetland vegetation impacts to the maximum extent possible when conducting non-native and excess vegetation removal for pond effectiveness.
3. Maintain water quality to protect surface waters and ponds from excessive sediment-laden runoff.
4. Develop a buffer zone around the pond to maintain native trees, shrubs, and herbaceous plants while managing for nonnative, invasive, pest species.

5.4 Watershed Management (WM)

Watershed management is important to natural resources management because it has the potential to directly affect both surface water and groundwater quality and is critical to maintain valuable aquatic habitats. The watershed protection topics of concern and associated goals and objectives are as follows.

5.4.1 WM-1: Water Quality Monitoring Program for Surface Waters

Concern: There is the potential for point source and nonpoint source contamination from pollutants, sedimentation, and nutrients, especially waters downstream from the cantonment area and parking sites. Pollutants can degrade water quality in surface waters and violate provisions of the CWA.

Objective: Maintain high quality surface waters to support viable populations of native aquatic and terrestrial life. Remain in compliance with ESA, CWA, and other regulatory drivers.

Actions:

1. Implement provisions of the stormwater BMP's including sampling prior to discharging water offsite to the irrigation district.
2. To the maximum extent feasible, maintain buffers between percolation/evaporation ponds, riparian areas, or drainages and construction or other ground-disturbance areas.
3. Continue groundwater monitoring and remediation program and continue to prohibit the use of shallow groundwater from on-site wells within the contaminated zone.

5.5 Fish and Wildlife Management (FW)

For the purposes of this INRMP, wildlife management is defined as manipulation of the environment and wildlife populations to produce desired objectives. The primary goal of wildlife management at Defense Distribution Depot San Joaquin is to maintain wildlife populations at levels compatible with land use objectives while promoting the existence, importance, and benefits of nongame species.

Defense Distribution Depot San Joaquin management activities include minimal direct wildlife management. The primary focus of management involves habitat management. The fish and wildlife management topics of concern and associated objectives and actions are as follows.

5.5.1 FW-1: General Wildlife Management

Concern: Biotic surveys are conducted every 5 years or prior to the INRMP revision in accordance with AR 200-1. These data are cross-referenced with current threatened, endangered, species of concern, and noxious weed lists to ensure that management actions are appropriate.

Objective: Establish a general wildlife population trend monitoring program as a component of long-term ecological trend monitoring.

Actions:

1. Continue to do biotic surveys every 5 years, prior to the INRMP revision, to monitor significant changes in wildlife species or populations present on Defense Distribution Depot San Joaquin.
2. Continue documenting nongame species that are incidentally observed during species of concern surveys.
3. Maintain an updated inventory of plants and animals present on Defense Distribution Depot San Joaquin.
4. Ensure that the natural resources staff members responsible for flora and fauna management and conservation obtain focused training regarding management of these resources as related to conservation on a military installation.

5.5.2 FW-2: Compliance with Migratory Bird Treaty Act

Concern: The MBTA prohibits “take” of migratory birds except by permit; permit requirements are exempt for military training but not for construction, operations, or maintenance of a military installation. Permits will only be sought if necessary for activities which may result in an incidental take.

Objective: Comply with MBTA and minimize incidental loss of migratory and non-migratory birds.

Actions:

1. Conduct surveys of activity sites as needed to determine if migratory bird nests are present and active. If necessary, Defense Distribution Depot San Joaquin will apply for an appropriate permit for intentional take of migratory birds.
2. Work with project proponents and Defense Distribution Depot San Joaquin directorates to develop effective management for minimizing the unintentional take of migratory birds.
3. Avoid and minimize impacts on migratory birds in and around the installation as individual projects are developed:
    a. Where disturbance is necessary, clear natural or semi-natural habitats and perform maintenance activities (e.g., mowing) between September 1 and January 31, which is outside the nesting season for most native bird species, including the burrowing owl (CDFG 2012). Without undertaking specific analysis of breeding species and their respective nesting seasons on the project site, implementation of this seasonal restriction

will avoid take of most breeding birds, their nests, and their young (i.e., eggs, hatchlings, fledglings).

b. Minimize land and vegetation disturbance during project design and construction. To reduce habitat fragmentation, co-locate roads, fences, laydown areas, staging areas, and other infrastructure in or immediately adjacent to already disturbed areas (e.g., existing roads). Where this is not possible, minimize roads, fences, and other infrastructure.

c. Develop a habitat restoration plan for any proposed disturbance site that avoids or minimizes negative impacts on vulnerable wildlife. Use only plant species that are native to the local area for revegetation of the project area.

4. Follow management recommendations in the IPMP to discourage birds from entering or nesting on buildings.

5.5.3 FW-3: External Assistance

Concern: The rapid development of natural resources management combined with DOD personnel cutbacks have resulted in the need for outside assistance with natural resources programs.

Objectives: Provide external specialized skills, personnel, and resources to support Defense Distribution Depot San Joaquin natural resources program.

Actions:

1. Cooperate with state and federal agencies to assist with wildlife management.
2. Explore opportunities to conduct research through universities and other government agencies to assist with wildlife management.
3. Use contractors or other federal or state agencies to assist with fish and wildlife management.
4. Explore collaborative opportunities with local volunteer organizations such as the California Native Plant Society, Boy Scout troops, Girl Scout troops, and other community organizations to complete specific tasks to benefit natural resources.
5. The USFWS has the potential to provide management assistance through a reimbursable agreement.

5.6 Habitat Management (HM)

Habitat management encompasses a range of management issues that affect fish and wildlife, threatened and endangered species, and ecosystem drivers. Objectives and management actions for habitat management are presented as follows.

5.6.1 HM-1: Soil Resources Management

Concern: Soil erosion and compaction results in lack of protective vegetation cover, degrades surface water quality, adversely affects sensitive plant habitats, has the potential to undermine infrastructure and creates dangerous conditions for vehicle travel. Soil erosion from human

disturbance is associated with incorrectly managed stormwater, construction development and maintenance and use of existing dirt roads and highly used sites.

Objective: Minimize compaction and erosion from current and future activities. Identify and restore eroded sites.

Actions:

1. Monitor construction projects and coordinate with Roads and Grounds if heavy equipment work is needed.
2. Survey areas on post where soil erosion and compaction might occur from construction to ensure that BMPs within the erosion and sedimentation plan for that construction are implemented and effective.
3. Implement recommendations from erosion survey. Reseed with predominantly native seed. Use native pollinator species to the greatest extent possible per the Presidential Memorandum that directs DOD to use pollinator-friendly native landscaping and minimize use of pesticides harmful to pollinators.
4. Work with project proponents to identify potential erosion sites. Identify additional sites for land rehabilitation planning.
5. Require all earth-moving activities (including contractor operations) to comply with the erosion and sedimentation plan for that construction project.

5.7 Exotic and Invasive Species Management (INV)

Exotic and invasive species management is a large part of pest management. The Federal Noxious Weed Act and EO 13112 require federal agencies to control noxious and invasive species on federal lands. EO 13112 requires federal agencies to prevent the introduction of invasive species, detect and control populations of invasive species, and restore native species and habitat conditions in ecosystems that have been invaded. Objectives and management actions for invasive species management are presented below.

5.7.1 INV-1: Invasive Species Control

Concern: Comprehensive control of invasive and nonnative plant species should be a part of any overall site management and restoration program.

Objective: Develop an Invasive Plant Prevention Plan for any newly developed areas.

Actions:

1. Focus on the species and communities desired in place of the “weed” species, rather than on simply eliminating undesirable species. The species and communities desired will depend upon the management goals for a specific area. Use native pollinator species to the greatest extent possible per the Presidential Memorandum that directs DOD to use pollinator-friendly native landscaping and minimize use of pesticides harmful to pollinators.

2. Establish BMPs such as seed testing with the *Rules for Testing Seed*, published by the Association of Official Seed Analysts during landscaping projects to prevent new species from becoming established.
3. Include language in contracts with the construction companies to prevent the spread of invasive plant species on the installation.

5.8 Grounds Maintenance

In the process of identifying facilities and grounds maintenance actions, a list of goals was generated to create ecologically sustainable management objectives. Objectives and management actions for grounds maintenance are as follows.

5.8.1 GM-1: Integrated Pest Management

Concern: Pests can transmit diseases, compete with and have other negative effects on flora and fauna, and damage real property.

Objective: Control those plant and animal species that adversely affect natural resources management (e.g., reduce ecosystem functionality, displace native species) or affect the military mission or facilities on Defense Distribution Depot San Joaquin per the IPMP.

Actions:

1. Ensure compliance with environmental legislation, regulations, and guidelines.
2. Implement DOD Technical Guide No. 37 Integrated Management of Stray Animals on Military Installations (DOD 2012). Direct installation staff to cease feeding feral cats and educate them on the potential impacts to migratory bird populations. Coordinate with local animal control offices to remove feral cats from the installation.
3. Implement pest management controls from the IPMP and other pest-related guidance and plans.
4. Update the existing IPMP to ensure that the plan reflects changes in populations and current management issues.

5.8.2 GM-2: Eradication of Nonnative and Invasive Plant Species during Revegetation and Landscaping Activities

Concern: Nonnative and invasive species could be endangering populations of sensitive native species and creating lower quality habitat available for wildlife.

Objective: Determine the extent of nonnative and invasive plant species on the installation. Eradicate invasive species using methods that will cause the least disturbance of native species that might be present. Reseed with plant species that are well-adapted to the growing conditions in the Central Valley region. Develop and adopt proactive management measures to control the proliferation of invasive species.

Actions:

1. During grounds maintenance activities, identify areas where invasive species occur and develop specific management actions to target the populations of these species.
2. Use integrated pest management methods that include non-chemical control to reduce the amount of herbicide applied on the installation in accordance with the DOD Pest Management Measures of Merit stipulated in DODI 4150.07 (DOD 2008) and the Presidential Memorandum, *Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators* (June 2014).
3. For landscaping, use plants that are native to the local region as much as possible, or those that are not known to be invasive. Use native pollinator species to the greatest extent possible per the Presidential Memorandum that directs DOD to use pollinator-friendly native landscaping and minimize use of pesticides harmful to pollinators.
4. If necessary, coordinate with state and local regulators to obtain appropriate permits for nonnative and nuisance plant species eradication in wetland areas.

5.9 Agricultural Outleasing (AG)

Army policy requires an integrated approach to ecosystem management that manages natural systems and all their component parts — soil, water, wildlife, and vegetation. This policy supports multiple-use activities, including agriculture outleasing, when compatible with the mission and long-term ecosystem management goals. Authority to lease non-excess property for agricultural purposes is granted by 10 U.S.C. § 2667 and allows the Secretary of Army to lease lands not needed for the immediate military mission. The terms of the lease must be advantageous to the United States, promote the national defense, or be in the public interest, and money received from these leases is used to cover the administrative costs of outleasing and to support multiple-land use and other natural resources objectives.

The U.S. Army Corps of Engineers is the real estate agent for the lease and is responsible for administering all outleases in coordination with installation commanders. Duties of USACE personnel may include bid solicitation, bid openings, appraisals, awarding leases, establishing lease agreements, collecting and reporting proceeds, and lease inspections.

The Annex property, located to the north and northeast of the active installation, was acquired by DLA in 1993. Since that time, the Annex is primarily used for agricultural purposes. The lease was originally executed in 2007 and was subsequently modified in 2012 to extend the terms to the same lessee through December 2017 (DACA05-1-07-536). An updated lease is to be executed in 2018 (Parrish 2018).

Due to the potential environmental damage that can result from impact associated with agricultural activities, specific management goals have been developed to ensure that these activities remain productive and sustainable while providing benefit to the ecosystem. Leases must be managed to ensure that noxious weeds are controlled, sustainable levels of harvest are conducted, lands are maintained, and no significant alteration of the ecosystem occurs.

5.9.1 AG-1: Multiple-Use Management of Agricultural Outlease Area

Concern: Degradation or disruption can occur to soils, vegetation, or wildlife that occur in high-use areas of leased areas.

Objective: Protect natural resources on to property used for agricultural operations.

Action:

1. Provide lessees with a copy of the INRMP and conduct periodic checks of the lease activity to ensure compliance with the INRMP.
2. Collect, review, and submit pesticide/herbicide application data from the lessee as required by the IPMP and Army regulations.

5.10 Outdoor Recreation and Public Access (OR)

The Sikes Act and DOD Directive 4715.03, *Natural Resources Management Program*, allow for public access onto DOD lands for the enjoyment and use of natural resources, if such use and access are compatible with the military mission and if the ecosystem can support such use. DLA is a trustee of public land and has a responsibility to protect and enhance environmental quality, conserve natural resources, and provide opportunities for outdoor recreation. However, it must be recognized that land under DLA control was acquired solely for national defense purposes. Other uses are, therefore, secondary to mission needs.

Recreational land uses at Defense Distribution Depot San Joaquin are limited to a fitness center and a ball field in the northwestern corner of the installation. Sidewalks exist in some areas of the Depot; however, their primary function is to provide access to facilities rather than for recreational purposes. The Depot has no designated recreational facilities. The outdoor recreation topics of concern and associated objectives and actions are as follows.

5.10.1 OR-1: Public Access, General Safety, and Security

Concern: The consequences of public access regarding general safety and the operational security of the mission should be evaluated.

Objective: Establish and incorporate a public access protocol.

Action:

1. Create a public access protocol, if appropriate.

5.11 Public Outreach (EDU)

Defense Distribution Depot San Joaquin has a goal of promoting environmental partnership and stewardship. The goal can be reached by increasing public awareness of environmental programs, educating the workforce about the installation's environmental programs, and training customers on installation environmental requirements. Objectives and management actions for outreach and education are presented below.

5.11.1 EDU-1: Conservation Awareness

Concern: Conservation awareness is instrumental in creating conditions needed to manage natural resources. A conservation awareness program must be directed to both installation and external interests if it is to be effective.

Objectives: Provide information to internal and external interested communities regarding natural resources and associated management programs on Defense Distribution Depot San Joaquin.

Actions:

1. Improve the general natural resources program knowledge of all persons associated with Defense Distribution Depot San Joaquin, particularly those who come into regular contact with interested persons.
2. Use newspapers, the website, and special displays to inform the surrounding community of matters important to Defense Distribution Depot San Joaquin natural resources program.
3. Participate in Earth Day and other organized events, as appropriate, and evaluate other special events for their usefulness in promoting a stewardship image and conservation commitment.
4. Engage local community groups and educate the local community, installation personnel, and tenants about the installation natural resources program.

5.11.2 EDU-2: Personnel Training

Concern: Environmental education and communication with installation staff, tenants, and the public is a keystone of successful environmental management. Additionally, professional training for designated natural resources staff will inform staff about current regulations, technology, and studies, and will maintain an effective and professional program.

Objective: Educate military and civilian users and Defense Distribution Depot San Joaquin workforce on environmental programs on the installation to maintain compliance with environmental laws and minimize impacts on natural and cultural resources.

Actions:

1. Encourage natural resources staff to join professional societies and their state/regional chapters and to be active in them.
2. Ensure that designated natural resources personnel obtain the one-time or occasional refresher training needed to fulfill job requirements (e.g., GIS user training, NEPA training, endangered species documentation/consultation training).
3. Evaluate other conferences/workshops, such as the National Military Fish and Wildlife Association annual workshop, for their usefulness as training tools and send personnel to those most justified, based on current training needs and those most related to Defense Distribution Depot San Joaquin activities.

5.12 Surrounding Lands

As mentioned in Section 2.1 the Depot is located on the southeast side of the city of Tracy, California in the San Joaquin Valley. Land use in the San Joaquin Valley is predominantly agricultural and approximately 90 percent of the land in San Joaquin County is under agricultural use (SJMSCP 2000). Land use trends both within the city of Tracy and San Joaquin County are showing

the conversion of agricultural lands and open space to urban development (SJMSCP 2000 and City of Tracy 2011a).

Offsite land use has the potential to affect Defense Distribution Depot San Joaquin plans, programs, and activities. Offsite management by nearby landowners should be considered in the implementation of the management actions identified in this INRMP. Offsite development has the potential to affect the natural resources or mission priorities discussed in this INRMP.

6 INRMP Implementation Process

6.1 INRMP Implementation

The INRMP program ensures the implementation of year-round, cost-effective management activities and projects that meet the requirements of Defense Distribution Depot San Joaquin. Various organizations at the Depot are responsible for the implementation of the INRMP. Section 1.5 provides a description of these organizations and personnel.

Key installation personnel from the Depot will assume an oversight role to ensure the effective implementation of this Plan. They will be supported by Depot senior management and Headquarters DLA Environmental Management.

The most recent policy on INRMP implementation is contained in DODI 4715.03 (DOD 2011) and DODM 4715.03 (DOD 2013). According to DODM4715.03, an INRMP is considered implemented if an installation does the following (DOD 2013):

- Actively requesting and using funds for natural resources management projects, activities and other requirements in support of goals, and objectives identified in the INRMP.
- Ensuring that sufficient numbers of professionally trained natural resources management personnel are available to perform the tasks required by the INRMP.
- Inviting annual feedback from the appropriate USFWS and State fish and wildlife agency offices on the effectiveness of its INRMP.
- Documenting specific INRMP action accomplishments undertaken each year.
- Evaluating the effectiveness of past and current management activities and adapting those activities as needed to implement future actions.

DODI 4715.03 (2011) and the 2013 Memorandum of Understanding Between the U.S. Fish and Wildlife Service and the Association of Fish and Wildlife Agencies for a Cooperative Integrated Natural Resources Management Program on Military Installations allow a federal agency to enter into an agreement with another federal agency for services, when those services can be rendered in a more convenient or cost effective manner by another federal agency. INRMP implementation and enforcement services can be procured from Federal and State agencies having responsibility for the conservation or management of fish and wildlife in accordance with section 670a(d) of the Sikes Act. Therefore, the USFWS and CDFW should be given consideration when procuring natural resource-related services.

6.2 Annual Work Plan

The purpose of this section is to present a road map for the implementation of specific management goals and objectives for several natural resources subject areas. The tasks proposed for this INRMP are aggressive and might not be accomplished within the established timelines due to a number of factors (e.g., budget and manpower constraints, wartime tasks). However, their importance to the proper management of the installation's natural resources cannot be understated. Therefore, the management actions should be modified as part of the annual review of this INRMP by the INRMP

Working Group to ensure that these tasks are continually emphasized and accomplished when practicable. Table 7 provides a brief summary of the estimated oversight required from fiscal year 2018 through fiscal year 2022 to accomplish the actions identified in Section 5 and Appendix C.

Table 7. Estimated Total Oversight Labor Hours for Implementing 2018 INRMP

INRMP Funding Category	Oversight Estimated Labor Hours
Ecosystem Management	
Threatened, Endangered, and Species of Concern	
Wetlands and Waters of the United States	
Watershed Management	
Fish and Wildlife Management	
Habitat Management	
Exotic and Invasive Species Management	
Grounds Maintenance	
Agricultural Outleasing	
Outdoor Recreation	
Environmental Awareness, Education, and Outreach	
Surrounding Lands	
Total	

6.3 Prioritization of Projects

Project priority within this INRMP is initially determined by funding classification, as defined in DODI 4715.03*, Natural Resources Conservation Program* (DOD 2011). DODI 4715.03 discusses recurring and non-recurring conservation management requirements. Table 8 defines the recurring and non-recurring conservation requirements in DODI 4715.03.

Table 8. Recurring and Non-Recurring Conservation Requirements

Recurring and Non-Recurring Conservation Requirements (DODI 4715.03)
1. Recurring Natural Resources Conservation Management Requirements: a. Administrative, personnel, and other costs associated with managing the DOD Natural Resources Conservation Program that are necessary to meet applicable compliance requirements in Federal and state laws, regulations, EOs, and DOD policies, or in direct support of the military mission. b. DOD components shall give priority to recurring natural resources conservation management requirements associated with the operation of facilities, installations, and deployed weapons systems. These activities include day-to-day costs of sustaining an effective natural resources management program; and annual requirements, including manpower, training, supplies, permits, fees, testing and monitoring, sampling and analysis, reporting and recordkeeping, maintenance of natural resources conservation equipment, and compliance self-assessments.

Recurring and Non-Recurring Conservation Requirements (DODI 4715.03)

2. Non-Recurring Natural Resources Management Requirements.
   a. Current Compliance. Includes installation projects and activities to support:
      (1) Installations currently out of compliance (e.g., received an enforcement action from an authorized Federal or state agency or local authority).
      (2) Signed compliance agreement or consent order.
      (3) Meeting requirements with applicable federal or state laws, regulations, standards, EOs, or DOD policies.
      (4) Immediate and essential maintenance of operational integrity or military mission sustainment.
      (5) Projects or activities that will be out of compliance if not implemented in the current program year. Those activities include the following:
         (a) Environmental analyses for natural resources conservation projects, and monitoring and studies required to assess and mitigate potential impacts of the military mission on conservation resources.
         (b) Planning documentation, master plans, compatible development planning, and INRMPs.
         (c) Natural resources planning-level surveys.
         (d) Reasonable and prudent measures included in incidental take statements of biological opinions, biological assessments, surveys, monitoring, reporting of assessment results, or habitat protection for listed, at-risk, and candidate species so that proposed or continuing actions can be modified in consultation with USFWS or National Oceanic and Atmospheric Service Fisheries Service.
         (e) Mitigation to meet existing regulatory permit conditions or written agreements.
         (f) Nonpoint source pollution or watershed management studies or actions needed to meet compliance dates cited in approved state coastal nonpoint source pollution control plans, as required to meet consistency determinations consistent with Coastal Zone Management.
         (g) Wetlands delineation critical for the prevention of adverse impacts on wetlands, so that continuing actions can be modified to ensure mission continuity.
         (h) Compliance with missed deadlines established in DOD executed agreements.
   b. Maintenance Requirements: Includes those projects and activities needed to meet an established deadline beyond the current program year and maintain compliance. Examples include the following:
      (1) Compliance with future deadlines.
      (2) Conservation, GIS mapping, and data management to comply with Federal, state, and local regulations, EOs, and DOD policy.
      (3) Efforts undertaken in accordance with non-deadline specific compliance requirements of leadership initiatives.
      (4) Wetlands enhancement to minimize wetlands loss and enhance existing degraded wetlands.
      (5) Conservation recommendations in biological opinions issued pursuant to the ESA.
   c. Enhancement Actions Beyond Compliance. Includes those projects and activities that enhance conservation resources or the integrity of the installation mission, or are needed to address overall environmental goals and objectives, but are not specifically required by law, regulation, or EO, and are not of an immediate nature. Examples include the following:
      (1) Community outreach activities, such as International Migratory Bird Day, Earth Day, National Public Lands Day, Pollinator Week, and Arbor Day activities.
      (2) Educational and public awareness projects, such as interpretive displays, oral histories, Watchable Wildlife areas, nature trails, wildlife checklists, and conservation teaching materials.
      (3) Restoration or enhancement of natural resources when no specific compliance requirement dictates a course or timing of action.
      (4) Management and execution of volunteer and partnership programs.

6.4 Funding

6.4.1 Traditional Funding Sources and Mechanisms

All requirements set forth in this INRMP requiring the expenditure of Defense Distribution Depot San Joaquin funds are expressly subject to the availability of appropriations and the requirements of the Anti-Deficiency Act (31 U.S.C. § 1341). No obligation undertaken by Defense Distribution Depot San

Joaquin under the terms of this INRMP shall require, or be interpreted to require, a commitment to expend funds not appropriated by the Congress for a particular purpose. If the installation cannot perform any obligation set forth in this INRMP due to the non-availability of funds, Defense Distribution Depot San Joaquin intends for the remainder of the agreement to be executed.

While some of the actions described in this INRMP could be funded under "Environmental Compliance" in addition to "Conservation Resources Management" such as Legacy funds, the most probable funding sources for the majority of the actions are Operations and Maintenance Funds, and Agricultural Reimbursement Authority Funds. While the categories listed provide a brief summary of budget priorities and funding sources, it is the responsibility of the installation Environmental Manager to carefully examine and adhere to the entirety of the referenced DODI, and any subsequent supplements or revisions, in preparing each year's budget for implementation of the actions identified in this INRMP.

DOD cannot commit funding before Congress makes it available (DOD 2011). In order to program for future expected expenses, DOD employs the Planning, Programming, Budget and Execution (PPBE) budget process. The PPBE is an ongoing process and is continuously reviewed and refined. Environmental budget requirements are identified by the installation staff, submitted to its Major Command, and then included in the Program Objectives Memorandum (POM), which is modified and forwarded to the Chief of Staff, to the Secretary of the Army, the Secretary of Defense, and to the President.

The Office of Management and Budget considers funding for the preparation and implementation of this INRMP, as required by the Sikes Act, and the associated NEPA analysis and documentation to be a high priority. However, the reality is that not all of the projects and programs identified in this INRMP will receive immediate funding. As such, these programs and projects have been placed into three priority-based categories: (1) high-priority projects, (2) important projects, and (3) projects of lesser importance. The prioritization of the projects is based on need, and need is based on a project's importance in moving the natural resources management program closer towards successfully achieving its goal.

6.4.2 Non-Traditional Funding Sources and Mechanisms

Nontraditional sources of funding for natural resources programs include non-appropriated reimbursable funds (i.e., agricultural or grazing outleasing, forestry, hunting and fishing fees), and appropriated funds (e.g., DOD Legacy Program). Installations, however, should not depend on these programs to fully fund their natural resources management programs.

1. **Agricultural Reimbursement Authority.** Of the non-traditional sources, the Agricultural Reimbursement Authority funds are most applicable to Defense Distribution Depot San Joaquin. Money collected through the leasing of Army-owned property for agricultural use is directed back into the natural resources program and reallocated by the DA. These funds are available as long as the agricultural lease is in place to natural resource managers primarily for agricultural outlease improvements, and potentially for natural resources management and stewardship projects once the primary objective is met. Agricultural and grazing outlease revenues are available for the following:

- Administrative expenses of lease (salaries of professional and technical support of the grazing and cropland programs in direct support of agricultural or grazing outlease which meet INRMP goals and objectives, training, scientific meetings, parts and supplies);
- Initiation, improvement, and perpetuation of agricultural or grazing outleases (increased productivity, reduced soil erosion, and fencing);
- Implementation of INRMP Stewardship Projects (compliance measures should be budgeted through the POM process).

2. **Legacy Funds.** The Legacy Resource Management Program (Legacy Program) is a special congressionally-mandated initiative to fund military conservation projects. The Legacy Program can provide funding for a variety of conservation projects, such as regional ecosystem management initiatives, habitat preservation efforts, archaeological investigations, invasive species control, monitoring and predicting migratory patterns of birds and animals, and national partnerships and initiatives, such as National Public Lands Day.

3. **Fish and Wildlife Fees.** User fees collected for the privilege of hunting, fishing, or trapping will be collected, deposited and used in accordance with the Sikes Act (10 U.S.C. § 2671) and the DOD financial management regulations. The Sikes Act specifies that user fees collected for hunting, fishing or trapping shall be used only on the installation where collected. Further, collections will be used exclusively for fish and wildlife conservation and management on the installation where collected.

4. **Strategic Environmental Research and Development Program (SERDP) Funds.** SERDP is DOD's corporate environmental Research and Development program, planned and executed in full partnership with the Department of Energy (DOE) and USEPA, with participation by numerous other Federal and non-Federal organizations. SERDP funds for environmental and conservation are allocated through a competitive process. Within its broad areas of interest, the SERDP focuses on Cleanup, Compliance, Conservation, and Pollution Prevention technologies. The purpose of the conservation technology program is to use research and development to provide improved inventory and monitoring capabilities, develop more effective impact and risk assessment techniques, and provide improved mitigation and rehabilitation capabilities.

5. **Non-DOD Funds.** Many grant programs are available for natural resources management projects, such as watershed management and restoration, habitat restoration, and wetland and riparian area restoration. When federally funded, these programs typically require non-Federal matching funds. However, installations may partner with other groups to propose eligible projects. Following are examples of grant programs:

    a. The Five-Star Restoration Challenge Grants Program, sponsored by both Federal and nonprofit organizations, provides modest financial assistance in support of community-based wetland and riparian restoration projects. One of the goals of the program is to build partnerships between Federal, state, local, and nonprofit organizations, and to foster local natural resources stewardship.

b. National Public Lands Day Grants. Installations are eligible to receive DOD Legacy funds in support of National Public Lands Day. Projects eligible for funds include habitat restoration, wetland restoration, and stream cleanup.

Currently, Defense Distribution Depot San Joaquin personnel are responsible for implementing programs at the installation other than the natural resources management responsibilities that will be necessary to implement this INRMP. Additional sources of temporary labor, such as seasonal employees (e.g., grounds maintenance summer hires), could be used to augment current staff. Implementation of a number of projects discussed in this INRMP will require active outside assistance. The outside assistance might come from state and Federal agencies, private consortiums and organizations, universities, and contractors. Using these resources is the most efficient and cost-effective method for acquiring expertise on a temporary basis. The INRMP Working Group should assess the level of additional resources necessary to implement this Plan fully during the INRMP annual review process and determine the extent to which outside assistance will be required.

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Appendix A. Acronyms and Abbreviations

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AR	Army Regulation
BCC	Bird of Conservation Concern
BMP	Best Management Practice
CA-CESU	Californian Cooperative Ecosystems Studies Unit
Cal-IPC	California Invasive Plant Council
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CNPS	California Native Plant Society
CWA	Clean Water Act
DA	Department of the Army
DDRW	Defense Distribution Region-West
DERA	Defense Environmental Restoration Account
DLA	Defense Logistics Agency
DOD	Department of Defense
DODI	Department of Defense Instruction
DODM	Department of Defense Manual
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ERP	Environmental Restoration Program
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
GHG	greenhouse gas
HQ	Headquarters
ICRMP	Integrated Cultural Resources Management Plan
INRMP	Integrated Natural Resources Management Plan
IPMP	Integrated Pest Management Plan
LEED	Leadership in Energy and Environmental Design
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
OSHA	Occupational Safety and Health Administration
PIF	Partners in Flight

POM	Program Objectives Memorandum
PPBES	Planning, Programming, Budget and Execution System
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SSC	species of special concern
SWMU	Solid Waste Management Unit
TSCA	Toxic Substances Control Act
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers
USAEC	U.S. Army Environmental Command
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

B

Appendix B. Relevant Environmental Laws, Regulations, Policies, Guidance, Instructions, and Orders

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FEDERAL LAWS, REGULATIONS, AND EXECUTIVE ORDERS

American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996)

Anadromous Fish Conservation Act (16 U.S.C. 757)

Animal Damage Control Act (7 U.S.C. 426 et seq.)

Anti-Deficiency Act (31 U.S.C. 1341 et seq.)

Antiquities Act of 1906 (16 U.S.C. 431 et seq.)

Archaeological Resource Protection Act Regulations (18 CFR 1312)

Archeological and Historical Preservation Act of 1974 (16 U.S.C. 469 et seq.)

Archeological Resources Protection Act of 1979 (16 U.S.C. 470 et seq.)

Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.)

Base Closure and Realignment Act (Part A of title XXIX of Public Law 101–510; 10 U.S.C. 2687)

Clean Air Act, as amended (42 U.S.C. 7401 et seq.)

Clean Water Act (33 U.S.C. 1251 et seq.)

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601 et seq.)

Conservation and Rehabilitation Program on Military and Public Lands (16 U.S.C. 670 et seq.)

Conservation and Rehabilitation Programs on Military and Public Lands (Public Law 93–452)

Cooperative Conservation (Executive Order 13352)

Council on Environmental Quality Regulations on Implementing NEPA Procedures (40 CFR 1500–1508)

Curation of Federally Owned and Administered Archaeological Collections (36 CFR 79)

Defense Environmental Restoration Program (10 U.S.C. 2701)

Department of Defense Appropriation Act of 1991 (PL 102–393)

Determination of Eligibility for Inclusion in the National Register of Historic Places (36 CFR 63)

Dredge and Fill Nationwide Permit Program (33 CFR 330)

Endangered and Threatened Wildlife and Plants (50 CFR 17)

Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)

Entering Military, Naval, or Coast Guard Property (18 U.S.C. 1382)

Environmental Effects in the United States of Department of Defense Actions (32 CFR 188)

USEPA Guidelines for Resource Recovery Facilities (40 CFR 245)

USEPA National Drinking Water Regulations (40 CFR 141–143)

USEPA National Pollutant Discharge Elimination System Permit Regulations (40 CFR 122)

USEPA Regulations Designating Areas for Air Quality Planning (40 CFR 81)

USEPA Regulations for Ambient Air Monitoring Reference and Equivalent Methods (40 CFR 53)

USEPA Regulations for Pesticide Programs (40 CFR 150–186)

USEPA Regulations Implementing the Resource Conservation and Recovery Act (40 CFR 260–270)

USEPA Regulations on Criteria and Standards for the National Pollutant Discharge Elimination System (40 CFR 125)

USEPA Regulations on Discharge of Oil (40 CFR 110)

USEPA Regulations on Disposal Site Determination under the CWA (40 CFR 231)

USEPA Regulations on Implementation of NEPA Procedures (40 CFR 6)

USEPA Regulations on Insecticide, Fungicide, and Rodenticide Use (40 CFR 162)

USEPA Regulations on Land Disposal Restrictions (40 CFR 268)

USEPA Regulations on National Primary and Secondary Ambient Air Quality Standards (40 CFR 50)

USEPA Regulations on Regional Consistency under the Clean Air Act (40 CFR 56)

USEPA Requirements for Preparation, Adoption, Submittal, Approval, and Promulgation of Implementation Plans (40 CFR 51–52)

USEPA Requirements for Water Quality Planning and Management (40 CFR 130)

USEPA Special Exemptions from Requirements of the Clean Air Act (40 CFR 69)

Erosion Protection Act (33 U.S.C. 426)

Farmland Protection Act (7 U.S.C. 4201 et seq.)

Federal Compliance with Pollution Control Standards (42 U.S.C. 4321)

Federal Consistency with Approved Coastal Management Programs (15 CFR 930)

Federal Facilities Compliance Act of 1992 (42 U.S.C. 6961)

Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C. 136 et seq.)

Federal Land Policy and Management Act (43 U.S.C. 1701)

Federal Noxious Weed Act (7 U.S.C. 2801 et seq.)

Federal Plant Pest Act (7 U.S.C. 150aa et seq.)

Federal Water Pollution Control Act (Clean Water Act) (33 U.S.C. 1251 et seq.)

Fish and Wildlife Conservation Act (16 U.S.C. 2901 et seq.)

Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.)

Fish and Wildlife Service List of Endangered and Threatened Wildlife (50 CFR 17)

Fishery Conservation and Management Act of 1976 (16 U.S.C. 1801 et seq.)

Floodplain Management (Executive Order 11988, as amended by Executive Order 12148 and 13286)

Forest Resources Conservation and Shortage Relief Act (16 U.S.C. 620 et seq.)

Historic Sites Act of 1935 (16 U.S.C. 461 et seq.)

Hunting and Fishing on Federal Lands (10 U.S.C. 2671 et seq.)

Implementation of Section 311 of the Federal Water Pollution Control Act of October 18, 1972, as amended, and the Oil Pollution Act of 1990 (Executive Order 12777, as amended by Executive Order 13286)

Interagency Cooperation Endangered Species Act of 1973(50 CFR 402)

Invasive Species (Executive Order 13112)

Lacey Act (16 U.S.C. 701) and Lacey Act Amendments of 1981 (16 U.S.C. 3371–3378)

Land and Water Conservation Act of 1965 (16 U.S.C. 4601 et seq.)

Legacy Resource Protection Program Act (PL 101–511)

Migratory Bird Conservation Act (16 U.S.C. 715 et seq.)

Migratory Bird Treaty Act (16 U.S.C. 703–711)

Migratory Birds List (50 CFR 10.13)

Military Construction Authorization Act of 1956–Leases; non-excess property (10 U.S.C. 2667)

Military Construction Authorization Act of 1956–Sale of Certain Interests in Lands; Logs (10 U.S.C. 2665)

Military Construction Authorization Act of 1956–Military Reservations and Facilities: Hunting, Fishing, and Trapping (10 U.S.C. 2671)

Military Construction Authorization Act of 1975 (10 U.S.C. 2665)

Military Reservation and Facilities: Hunting, Fishing and Trapping (10 U.S.C. 2671)

Multiple-Use Sustained Yield Act (16 U.S.C. 528)

National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.)

National Heritage Policy Act of 1979 (16 U.S.C. 470)

National Historic Landmarks Program (36 CFR 65)

National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.)

National Historic Preservation Act Regulations for the Protection of Historic Properties (36 CFR 800)

National Register of Historic Places (36 CFR 60)

National Register of Historic Places, current edition (36 CFR 60 78, 79, 800, and 1228)

National Trails System Act of 1968 (16 U.S.C. 1271)

Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001–3013)

Natural Resources Management Program (32 CFR 190)

Neotropical Migratory Bird Conservation Act (16 U.S.C. 6101 et seq.)

Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended (16 U.S.C. 4701et seq.)

North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.)

Noxious Plant Control Act (43 U.S.C. 1241).

Off-Road Vehicles Use on Public Lands (Executive Order 11989)

Oil Pollution Control Act of 1990 (33 U.S.C. 2701 et seq.)

Outdoor Recreation–Federal/State Program Act (16 U.S.C. 4601 et seq.)

Outer Continental Shelf Air Regulations (40 CFR 55)

Partners for Fish and Wildlife Act (16 U.S.C. 3771 et seq.)

Plant Quarantine Act (7 U.S.C. 151–167)

Pollution Prevention Act (42 U.S.C. 13101 et seq.)

Protection and Enhancement of Environmental Quality (Executive Order 11514, as amended by Executive Order 11541 and 11991)

Protection and Enhancement of the Cultural Environment (Executive Order 11593)

Protection of Wetlands (Executive Order 11990, as amended by Executive Order 12608)

Recreational Fisheries (Executive Order 12962, as amended by Executive Order 13474)

Regulations Concerning Marine Mammals (50 CFR 10)

Regulations Concerning Marine Mammals (50 CFR 18, 216, 228)

Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.)

Responsibilities of Federal Agencies to Protect Migratory Birds (Executive Order 13186)

Safe Drinking Water Act (42 U.S.C. 300(f) et seq.)

Sales of Forest Products on Federal Lands (10 U.S.C. 2665 et seq.)

Sikes Act Improvement Act of 1997 (16 U.S.C. 670a et seq.)

Soil and Water Conservation Act (16 U.S.C. 2001 et seq.)

Soil Conservation (16 U.S.C. 5901)

Strengthening Federal Environmental, Energy, and Transportation Management (Executive Order 13423)

Water Pollution Prevention and Control (33 U.S.C. 1251 et seq.)

Wetland Resources (16 U.S.C. 3901)

Youth Conservation Corps Act of 1972 (16 U.S.C. 1701)

FEDERAL GUIDELINES

Cooperative Agreement between the Department of Defense and the Nature Conservancy for Assistance in Natural Resources Inventory

Memorandum of Agreement for Federal Neotropical Migratory Bird Conservation Program and Addendum (Partners in Flight-Aves De Las Americas) among the Department of Defense, through Each of the Military Services, and Over 110 Other Federal and State Agencies and Nongovernmental Organizations

Memorandum of Agreement for Professional and Technical Assistance Conducting Biological Surveys, Research and Related Activities between the Department Of Defense and the National Biological Service of the Department of the Interior

Memorandum of Understanding between Department of Defense, U.S. Fish and Wildlife Service, and the International Association of Fish and Wildlife Agencies for a Cooperative Integrated Natural Resources Management Program on Military Installations

Memorandum of Understanding between the Environmental Protection Agency and the Department of Defense with Respect to Integrated Pest Management

Memorandum of Understanding for Watchable Wildlife Programs

USACE Regional Supplement to the Corps of Engineers *2008* Wetland Delineation Manual: Arid West Region (Version 2.0).

DEPARTMENT OF DEFENSE POLICY, REGULATIONS AND GUIDANCE

AR 200–1, *Environmental Protection and Enhancement* (2007)

AR 210–20, *Real Property Master Planning for Army Installations* (2005)

AR 350–19, *The Army Sustainable Range Program* (2005)

AR 405–80, *Granting Use of Real Estate* (1997)

Army Goals and Implementing Guidance For Natural Resources Planning Level Survey and Integrated Natural Resources Management Plan (1997)

Army Policy and Guidance on Critical Habitat Designations (2001)

Army Policy Guidance for Fish & Wildlife Conservation Fund (2001)

Army Policy Guidance for Management and Control of Invasive Species (2001)

Army Policy Guidance on Migratory Bird Treaty Act (2001)

Department of Army Memorandum, Sustainable Design and Development Policy Update – SPiRiT to LEED Transition (2006)

Department of Army Pam 420–7, *Natural Resources – Land, Forest, and Wildlife Management* (1977)

Deputy Under Secretary of Defense Memorandum, *Integrated Natural Resource Management Plan Template* (2006)

DLA Instruction 4108, *Natural and Cultural Resources Conservation Programs* (2009)

DLA Regulation 1000.22, *Environmental Considerations in Defense Logistics Agency Actions* (2011)

DOD Directive 3200.15, *Sustaining Access to the Live Training and Test Domain* (2013)

DOD Directive 4705.1, *Management of Land-Based Water Resources in Support of Joint Contingency Operations* (1992)

DOD Directive 4715.1E, *Environment, Safety, and Occupational Health (ESOH)* (2005)

DOD INRMP Handbook, *Resources for INRMP Implementation* (2005)

DOD Instruction 4001.01, *Installation Support* (2008)

DOD Instruction 4150.07, *DoD Pest Management Program* (2008)

DOD Instruction 4165.57, *Air Installations Compatible Use Zones* (1977)

DOD Instruction 4715.03, *Natural Resources Conservation Program* (2011)

DOD Instruction 4715.4, *Pollution Prevention* (1996)

DOD Instruction 4715.06, *Environmental Compliance in the United States* (2015)

DOD Instruction 4715.07, *Defense Environmental Restoration Program (DERP)* (2013)

DOD Instruction 6050.05, *DoD Hazard Communication Program* (2006)

DOD Instruction 6055.6, *DoD Fire and Emergency Services Program* (2006)

DOD Memorandum on Implementation of Ecosystem Management in DoD (2002)

Army Memorandum Emergency Consultations under the Endangered Species Act (2002)

Supplemental Army Policy Guidance on Migratory Bird Treaty Act (2002)

APPLICABLE STATE AND LOCAL REGULATION

Aquatic Invasive Species (Fish & Game Code 2300-2302)

Birds (Fish & Game Code 3500-3864)

California Endangered Species Act (Fish & Game Code 2050 et seq.)

California Environmental Quality Act (Public Resources Code 21000-21177)

California Riparian Habitat Conservation Program (Fish & Game Code 1385-1391)

California Waterfowl Habitat Program (Fish & Game Code 3460-3467)

California Watershed Protection and Restoration Act (Public Resources Code 5808-5808.2)

California Wildlife Protection Act (Fish & Game Code 2780-2799.6)

California Wildlife, Coastal, and Park Land Conservation Act (Public Resources Code 5900 et seq.)

Cobey-Alquist Flood Management Act (Water Code 8400-8415)

Conservation of Aquatic Resources (Fish & Game Code 1700)

Conservation of Wildlife Resources (Fish & Game Code 1801-1802)

Conservation, Development, and Utilization of State Water Resources (Water Code 10004-10013)

Fish (Fish & Game Code 6400-6930)

Fish and Wildlife Habitat Enhancement Act of 1984 (Fish & Game Code 2600-2651)

Fish and Wildlife Protection and Conservation (Fish & Game Code 1600-1616)

Inland Wetlands Conservation Program (Fish & Game Code 1400-1431)

Mammals (Fish & Game Code 4150-4904)

Management of Fish and Wildlife on Military Lands (Fish & Game Code 3450-3453)

Native Plant Protection (Fish & Game Code 1900-1913)

Native Species Conservation and Enhancement (Fish & Game Code 1750-1772)

Natural Community Conservation Planning Act (Fish & Game Code 2800-2835)

Pesticides and Pest Control Operations (Food and Agriculture Code 6000 et seq.)

Porter-Cologne Water Quality Control Act (Water Code 13000 et seq.)

Refuges (Fish & Game Code 10500-10932)

Reptiles and Amphibians (Fish & Game Code 5000-5050)

Stream Alteration Controls (Water Code 5653, 1601 et seq.)

The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Public Resources Code 75001-75130)

Urban Forestry (Public Resources Code 4799.06-4799.12)

Watershed, Clean Beaches, and Water Quality Act (Public Resources Code 30901-30960)

Wetlands Mitigation Banking (Fish & Game Code 1850-1852)

Wetlands Preservation (Public Resources Code 5810-5818.2)

Wildlife and Natural Areas Conservation Program (Fish & Game Code 2700-2729)

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Appendix C. INRMP Projects, Schedules, and Implementation Table

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Table C-1 contains natural resources projects proposed for Defense Distribution Depot San Joaquin and includes the INRMP subject area, a specific INRMP issue number, a project description, the corresponding law or regulation, DOD Class, proposed fiscal year for implementing each recommendation, and estimated costs for completion.

The projects presented in Table C-1 strive to enhance natural resources on Defense Distribution Depot San Joaquin, without impacting other installation plans and activities. Achieving these recommendations will require development to be conducted in an environmentally sensitive way (i.e., smart growth) and requires cooperation between the installation garrison, environmental offices, facilities and maintenance, and operations. Any future changes in mission, activity, or technology should be analyzed to assess their impact on natural resources. As new installation plans and DLA guidance and regulations are developed, they should be integrated with the drivers and management actions resulting from this INRMP.

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Table C-1. Defense Distribution Depot San Joaquin INRMP Projects and Implementation Table

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Ecosystem Management		ECO-1	Complete this version of the INRMP and use it as a beginning point to develop an ecosystem management approach to natural resources management.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018
Ecosystem Management		ECO-1	As needed, develop a process and schedule for coordinating with agencies to allow for agency comment on management plans.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Ecosystem Management		ECO-2	Foster landscape-scale thinking among installation staff and provide them with appropriate training if needed.	DODI 4715.03, AR 200-1	2c	2018-2022
Ecosystem Management		ECO-2	Implement actions, once plans are developed or revised, identified in the INRMP.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Threatened, Endangered, and Species of Concern		TES-1	Continue to conduct floristic and fauna surveys at established intervals (every 5 years) to determine any changes to the state of federally listed plants/animals located on the installation.	Sikes Act, DODI 4715.03, AR 200-1	2b	2019
Threatened, Endangered, and Species of Concern		TES-1	Maintain a list of special status plant and animal species with the potential to occur at Defense Distribution Depot San Joaquin.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Threatened, Endangered, and Species of Concern		TES-1	If listed species are found, or if species already known on the installation become listed, modify this INRMP for adequate management or protection of the species.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Threatened, Endangered, and Species of Concern		TES-1	Consider conducting remote sensing (e.g., trail cameras) surveys for the San Joaquin kit fox. Coordinate with USFWS to determine whether a reimbursable agreement for the surveys could be developed.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Threatened, Endangered, and Species of Concern		TES-2	Continue monitoring special status species as described in this INRMP and adapt monitoring and management actions as needed. Use monitoring information and other information gleaned to guide adaptive management.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2b	2018-2022
Threatened, Endangered, and Species of Concern		TES-2	Initiate habitat improvement projects to conserve biodiversity and protect plant and animal habitats, as funding is available and when such projects will not adversely affect the military mission.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2c	2018-2022
Threatened, Endangered, and Species of Concern		TES-2	Periodically review the natural resources management program to ensure that management actions do not adversely impact species of concern habitat.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2c	2018-2022
Threatened, Endangered, and Species of Concern		TES-3	Implement species-specific and overall conservation and monitoring measures described in this INRMP and those developed in future biological opinions.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2c	2019
Threatened, Endangered, and Species of Concern		TES-3	Develop special status species identification sheets for distribution to installation personnel. Provide information on how to avoid impacting these species.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2c	2018
Threatened, Endangered, and Species of Concern		TES-3	Continue use of the established Environmental Review process to identify actions that result in adverse effects on special status species or habitats. Coordinate measures with the proponent to reduce adverse effects.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2c	2018-2022
Threatened, Endangered, and Species of Concern		TES-3	Provide an environmental coordination map, which includes the following information: (1) Regulated areas in which activity restrictions are in place, (2) Special status species locations where pre-planning efforts might be necessary.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2c	2019
Threatened, Endangered, and Species of Concern		TES-4	Implement annual breeding season census surveys for burrowing owls throughout the installation.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Threatened, Endangered, and Species of Concern		TES-4	Implement pre-construction mitigation measures within suitable burrowing owl habitat including: pre-activity surveys; passive relocation of burrowing owls from construction zones; mitigating impacts to occupied burrows; installing and maintaining artificial burrows; mitigating impacts to unoccupied burrows; and mitigating impacts to foraging habitat.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022
Threatened, Endangered, and Species of Concern		TES-4	Avoid disturbing occupied burrows during the nesting period (1 February through 31 August) and avoid impacting burrows occupied during the non-breeding season by resident burrowing owls. Avoid direct destruction of burrows through chaining, disking, cultivation, and urban, industrial, or agricultural development. Place visible markers near burrows to ensure that farm equipment and other machinery do not collapse burrows.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022
Threatened, Endangered, and Species of Concern		TES-4	Outside of the nesting period (1 February through 31 August), mow areas that support borrowing owls to prevent invasive plants from reaching a height of approximately 5 inches.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022
Threatened, Endangered, and Species of Concern		TES-4	Develop and implement worker awareness program to increase the on-site worker's recognition and commitment to burrowing owl protection. Ensure agricultural outlease terms include these BMPs for protection of the species and maintenance of habitat as compatible with agricultural uses.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022
Threatened, Endangered, and Species of Concern		TES-4	Avoid fumigation of any animal burrows. Do not use treated bait or other means of poisoning nuisance animals in areas where burrowing owls are known or suspected to occur (e.g., sites observed with nesting owls, foraging habitat). Restrict the use of treated grain to poison mammal to bait stations placed in areas outside of burrowing owl habitat, only apply during the month of January, and use only when integrated pest management options are not effective (e.g., mechanical). Broadcast baiting is not permitted.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Threatened, Endangered, and Species of Concern		TES-4	Conduct a biological feasibility study to explore the potential for setting aside a portion of the agricultural annex for burrowing owl habitat. This study should include an assessment of current and past inhabited areas on the annex, short and long-term recommendations for managing or restoring those areas to suitable habitat conditions, and an analysis of the appropriate size and configuration of land that would be biologically meaningful for burrowing owl conservation.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022
Threatened, Endangered, and Species of Concern		TES-4	Conduct a logistical and financial feasibility study to determine the potential for setting aside a portion of the agricultural annex for burrowing owl habitat conservation (e.g., agricultural lease renewal schedules, potential mission impacts, integration with the Installation Master Plan).	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022
Threatened, Endangered, and Species of Concern		TES-4	Conduct a logistical and financial feasibility study to determine the potential for setting aside a portion of the agricultural annex for burrowing owl habitat conservation (e.g., agricultural lease renewal schedules, potential mission impacts, integration with the Installation Master Plan).	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022
Threatened, Endangered, and Species of Concern		TES-4	Ensure collaboration with CDFW and USFWS regarding burrowing owl habitat management planning during the annual INRMP review.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022
Threatened, Endangered, and Species of Concern		TES-4	In order to facilitate habitat for burrowing owls, proactively manage for the presence of ground squirrels when not in conflict with the military mission.	Sikes Act, ESA, DODI 4715.03, AR 200-1	2a	2018-2022
Wetlands and Waters of the U.S.		WT-1	Conduct Environmental Review for activities that could affect percolation/evaporation ponds.	Sikes Act, CWA, DODI 4715.03, AR 200-1	2a	2018-2022
Wetlands and Waters of the U.S.		WT-1	Plan development activities to avoid native wetland vegetation impacts to the maximum extent possible when conducting non-native and excess vegetation removal for pond effectiveness.	Sikes Act, CWA, DODI 4715.03, AR 200-1	2a	2018-2022

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Wetlands and Waters of the U.S.		WT-1	Maintain water quality to protect surface waters and ponds from excessive sediment laden runoff.	Sikes Act, CWA, DODI 4715.03, AR 200-1	2a	2018-2022
Wetlands and Waters of the U.S.		WT-1	Maintain a “no mow” zone around the pond to maintain any native trees, shrubs, and herbaceous plants.	Sikes Act, CWA, DODI 4715.03, AR 200-1	2c	2018-2022
Watershed Management		WM-1	Implement provisions of the SWPPP to include BMPs, monitoring, reporting, and modifying BMPs as needed.	Sikes Act, CWA, DODI 4715.03, AR 200-1	2a	2018-2022
Watershed Management		WM-1	To the maximum extent feasible, maintain buffers between percolation/evaporation ponds, riparian areas, or drainages and construction or other ground-disturbance areas.	Sikes Act, CWA, DODI 4715.03, AR 200-1	2c	2018-2022
Watershed Management		WM-1	Continue groundwater monitoring and remediation program and continue to prohibit the use of shallow groundwater from on-site wells within the contaminated zone.	Sikes Act, CWA, DODI 4715.03, AR 200-1	2a	2018-2022
Fish and Wildlife Management		FW-1	Continue to do biotic surveys every 5 years, prior to the INRMP revision, to monitor significant changes in wildlife species or populations present on Defense Distribution Depot San Joaquin.	Sikes Act, DODI 4715.03, AR 200-1	2a	2019
Fish and Wildlife Management		FW-1	Continue documenting nongame species that are incidentally observed during species of concern surveys.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Fish and Wildlife Management		FW-1	Maintain an updated inventory of plants and animals present on Defense Distribution Depot San Joaquin.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Fish and Wildlife Management		FW-1	Ensure that the natural resources staff members responsible for wildlife management and conservation obtain focused training regarding management of these resources as related to conservation on a military installation.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Fish and Wildlife Management		FW-2	Conduct surveys of activity sites as needed to determine if migratory bird nests are present and active. If necessary, Defense Distribution Depot San Joaquin will apply for an appropriate permit for intentional take of migratory birds.	Sikes Act, MBTA, DODI 4715.03, AR 200-1	2a	2018-2022
Fish and Wildlife Management		FW-2	Work with project proponents and Defense Distribution Depot San Joaquin directorates to develop effective management for minimizing the unintentional take of migratory birds.	Sikes Act, MBTA, DODI 4715.03, AR 200-1	2a	2018-2022
Fish and Wildlife Management		FW-2	Avoid and minimize impacts on migratory birds in and around the installation as individual projects are developed.	Sikes Act, MBTA, DODI 4715.03, AR 200-1	2a	2018-2022
Fish and Wildlife Management		FW-2	Follow management recommendations in the IPMP to discourage birds from entering or nesting on buildings.	Sikes Act, MBTA, DODI 4715.03, AR 200-1	2a	2018-2022
Fish and Wildlife Management		FW-3	Use state and federal agencies to assist with wildlife management.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Fish and Wildlife Management		FW-3	Explore opportunities to conduct research through universities to assist with wildlife management.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Fish and Wildlife Management		FW-3	Use contractors or other federal or state agencies to assist with fish and wildlife management.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Fish and Wildlife Management		FW-3	Explore collaborative opportunities with local Boy Scout troops, Girl Scout troops, and other community organizations to complete specific tasks to benefit natural resources.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Fish and Wildlife Management		FW-3	The USFWS has the potential to provide management assistance through a reimbursable agreement.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Habitat Management		HM-1	Monitor construction projects and coordinate with Roads and Grounds if heavy equipment work is needed.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Habitat Management		HM-1	Survey areas on post where soil erosion and compaction might occur from construction to ensure that BMPs within the erosion and sedimentation plan for that construction are implemented and effective.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Habitat Management		HM-1	Implement recommendations from erosion survey. Reseed with predominantly native seed mixtures or restore as needed. Use native pollinator species to the greatest extent possible per the Presidential Memorandum that directs DOD to use pollinator-friendly native landscaping and minimize use of pesticides harmful to pollinators.	Sikes Act, FIFRA, DODI 4715.03, AR 200-1	2c	2018-2022
Habitat Management		HM-1	Work with project proponents to identify potential erosion sites. Identify additional sites for land rehabilitation planning.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Habitat Management		HM-1	Require all earth-moving activities (including contractor operations) to comply with the erosion and sedimentation plan for that construction project.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Exotic and Invasive Species Management		INV-1	Focus on the species and communities desired in place of the “weed” species, rather than on simply eliminating undesirable species. The species and communities desired will depend upon the management goals for a specific area. Use native pollinator species to the greatest extent possible per the Presidential Memorandum that directs DOD to use pollinator-friendly native landscaping and minimize use of pesticides harmful to pollinators.	Sikes Act, EO 13112, FIFRA, DODI 4715.03, AR 200-1	2c	2018-2022
Exotic and Invasive Species Management		INV-1	Establish BMPs such as seed testing with the Rules for Testing Seed, published by the Association of Official Seed Analysts during landscaping projects to prevent new species from becoming established.	Sikes Act, EO 13112, DODI 4715.03, AR 200-1	2c	2018-2022
Exotic and Invasive Species Management		INV-1	Include language in contracts with the construction companies to prevent the spread of invasive plant species on the installation.	Sikes Act, FIFRA, EO 13112, DODI 4715.03, AR 200-1	2c	2018-2022

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Grounds Maintenance		GM-1	Ensure compliance with environmental legislation, regulations, and guidelines.	Sikes Act, EO 13112, DODI 4715.03, DODI 4150.7, AR 200-1	2a	2018-2022
Grounds Maintenance		GM-1	Direct installation staff to cease feeding feral cats and educate them on the potential impacts to migratory bird populations. Coordinate with local animal control offices to remove feral cats from the installation.	Sikes Act, EO 13112, DODI 4715.03, DODI 4150.7, AR 200-1	2a	2018-2022
Grounds Maintenance		GM-1	Implement pest management controls from the IPMP and other pest-related guidance and plans.	Sikes Act, EO 13112, DODI 4715.03, DODI 4150.7, AR 200-1	2a	2018-2022
Grounds Maintenance		GM-1	Update the existing IPMP to ensure that the plan reflects changes in populations and current management issues.	Sikes Act, EO 13112, DODI 4715.03, DODI 4150.7, AR 200-1	2a	2020
Grounds Maintenance		GM-2	During grounds maintenance activities, identify areas where invasive species occur and develop specific management actions to target the populations of these species.	Sikes Act, EO 13112, DODI 4715.03, AR 200-1	2c	2018-2022
Grounds Maintenance		GM-2	Use integrated pest management methods that include non-chemical control to reduce the amount of herbicide applied on the installation in accordance with the DoD Pest Management Measures of Merit and the Presidential Memorandum, *Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators* (June 2014).	Sikes Act, EO 13112, DODI 4715.03, DODI 4150.07, AR 200-1	2c	2018-2022
Grounds Maintenance		GM-2	For landscaping, use plants that are native to the local region as much as possible, or those that are not known to be invasive. Use native pollinator species to the greatest extent possible per the Presidential Memorandum that directs DOD to use pollinator-friendly native landscaping and minimize use of pesticides harmful to pollinators.	Sikes Act, FIFRA, EO 13112, DODI 4715.03, AR 200-1	2c	2018-2022
Grounds Maintenance		GM-2	If necessary, coordinate with state and local regulators to obtain appropriate permits for nonnative and nuisance plant species eradication in wetland areas.	Sikes Act, EO 13112, DODI 4715.03, AR 200-1	2c	2018-2022

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Agricultural Outleasing		AG-1	Provide lessees with a copy of the INRMP and conduct periodic checks of the lease activity to ensure compliance with the INRMP.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Agricultural Outleasing		AG-1	Collect, review, and submit pesticide/herbicide application data from the lessee as required by the IPMP and Army regulations.	Sikes Act, FIFRA, DODI 4715.03, AR 200-1	2a	2018-2022
Outdoor Recreation		OR-1	Create a public access protocol, if appropriate.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018
Environmental Awareness, Education and Outreach		EDU-1	Improve the general natural resources program knowledge of all persons associated with Defense Distribution Depot San Joaquin, particularly those who come into regular contact with interested persons.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Environmental Awareness, Education and Outreach		EDU-1	Use newspapers, the Web site, and special displays to inform the surrounding community of matters important to Defense Distribution Depot San Joaquin natural resources program.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Environmental Awareness, Education and Outreach		EDU-1	Participate in Earth Day and other organized events, as appropriate, and evaluate other special events for their usefulness in promoting a stewardship image and conservation commitment.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Environmental Awareness, Education and Outreach		EDU-1	Engage local community groups and educate the local community, installation personnel, and tenants about the installation natural resources program.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Environmental Awareness, Education and Outreach		EDU-2	Encourage natural resources staff to join professional societies and their state/regional chapters and to be active in them.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022

INRMP Subject Area	Responsible Party	INRMP Issue Number	Project Description	Federal, State, DoD or DA Law, Policy or Guidance[1]	DoD Class[2]	Fiscal Year
Environmental Awareness, Education and Outreach		EDU-2	Ensure that designated natural resources personnel obtain the one-time or occasional refresher training needed to fulfill job requirements (e.g., GIS user training, NEPA training, endangered species documentation/consultation training).	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022
Environmental Awareness, Education and Outreach		EDU-2	Evaluate other conferences/workshops, such as the National Military Fish and Wildlife Association annual workshop, for their usefulness as training tools and send personnel to those most justified, based on current training needs and those most related to Defense Distribution Depot San Joaquin activities.	Sikes Act, DODI 4715.03, AR 200-1	2c	2018-2022

Note:
1. This is not a comprehensive list of applicable regulation; other regulations, policy, or guidance may apply. Please review **Appendix B** for a comprehensive list of laws, policies or guidance for management of natural resources.
2. See Table 8 for a description of DoD funding classes.

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D

Appendix D. Documentation and Correspondence

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DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

September 14, 2015

Mr. Douglas Weinrich
U.S. Fish and Wildlife Service
2800 Cottage Way, Rm W-2605
Sacramento, CA 95825

Dear Mr. Weinrich:

HDR, Inc. has been contracted to prepare an Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) on behalf of Defense Logistics Agency's Defense Distribution Depot, San Joaquin (Depot) located in San Joaquin County in the city of Tracy. This document development is in accordance with the Sikes Act Improvement Amendment of 1997 (*16 United States Code [U.S.C.] 670a et seq.*). Per Executive Order 12372, *Intergovernmental Review of Federal Programs* and to promote collaboration during INRMP/EA development, the Depot Environmental Office is notifying various agencies and groups that have an interest in the Depot and the management of their resources in addition to FWS, including the California Department of Fish and Wildlife (CDFW) and the California Native American Heritage Commission. We request your participation in the review of the INRMP/EA when available for agency review in February 2016.

HDR, Inc. will be requesting an Official Species List from the regulatory documents section per the unofficial *USFWS Information for Planning and Conservation Trust Resource Report* generated online in July 2015 (Ref: G4UED-OHNRJ-ECZPR-FH7IL-HPCGNI). Additionally, CDFW may assist by providing a current listing and the location of threatened, endangered, or otherwise sensitive species known to occur on or in proximity to the Depot. This information will be incorporated into the INRMP and will be cited by reference. If applicable, exact locations of endangered or threatened species will not be included with any document that is publicly reviewed. We look forward to a continued working relationship with the FWS Pacific Southwest Region's, Sacramento Office. Thank you for your assistance.

If you have any questions, please contact the undersigned at (209) 839-4081.

Sincerely,

James A. Paslak

JAMES A. PASLAK
Environmental Protection Specialist

Enclosures

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 952960001

June 23, 2016

Douglas Weinrich
USFWS Sacramento Field Office
2800 Cottage Way, Rm W-2605
Sacramento, CA 95825

Subject: Draft Integrated Natural Resources Management Plan and Environmental Assessment (INRMP) for the Defense Logistic Agency's Defense Distribution Depot, San Joaquin (Depot)

Dear Mr. Weinrich

To follow up on our letter sent on 14 September 2015 notifying USFWS of the development of the Depot INRMP, the Depot is pleased to provide for your review and comment the Draft INRMP. This document was prepared in compliance with the Sikes Act and its amendments to include the coordination of this document with the USFWS. Please find enclosed one hard copy and one electronic copy (on CD) of the INRMP. This INRMP has also been sent to Ms. Tanya Sheya in the California Department of Fish and Wildlife North Central Region Office in Rancho Cordova for review and comment.

Please provide comments and recommendations on the Draft INRMP/EA by 20 July 2016, using the Comment Response Matrix (CRM) included on the CD. The CRM is a tool for tracking comments received, preparing responses, and monitoring changes in the INRMP. Comments should be submitted to Katherine Crosthwaite via e-mail (Katherine.Crosthwaite@hdrinc.com).

Should you have any questions about the document or the review process, please contact Kate Crosthwaite at 512.589.9500.

Sincerely,

James A. Paslak

JAMES A. PASLAK
Environmental Protection Specialist

Distribution: Brenda Mahan, DLA
Kate Crosthwaite, HDR

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, California 95825-1846

In Reply
Refer to:
08ESMF00-
2016-CPA-038

JUL 2 9 2016

James A. Paslak
Environmental Protection Specialist
Defense Logistics Agency
P.O. Box 960001
Stockton, California 95296-0001

Subject: U.S. Fish and Wildlife Service (Service) comments on Draft Integrated Natural Resources Management Plan and Environmental Assessment (INRMP) for the Defense Logistic Agency's Defense Distribution Depot, San Joaquin

Dear Mr. Paslak:

Enclosed are the Service's comments on the above document utilizing the Comment Response Matrix provided within your transmittal material. These comments were also provided to Katherine Crosthwaite via email as requested.

We look forward to working with you and your agency to develop an INRMP for the Defense Logistic Agency's Defense Distribution Depot, San Joaquin, Stockton, California.

If you have any questions regarding these comments please contact Amber Aguilera or myself at (916) 414-6563.

Sincerely,

Doug Weinrich

Doug Weinrich
Assistant Field Supervisor

Enclosure:

cc:
Tanya Sheya, CDFW, Rancho Cordova, CA

USFWS Comment Response Matrix DRAFT Integrated Natural Resource Management Plan and Environmental Assessment for Defense Distribution Center, San Joaquin, California						
#	Location			Comment	Reviewer	HDR Response
	Page	Line	Section			
0				**Environmental Assessment Comments**		
1	16	24	3.10.2	Suggest replacing "provide" with "improve." Since Federal agencies are currently required by the ESA to participate in the conservation and recovery of federally-listed threatened and endangered species the baseline (current condition) is *provided*. Development and implementation of the INRMP would *improve* protection and management of these species.	Weinrich	replaced
2	17	16-17	4	This sentence is not clear. Is it saying the effects of implementing the management measures in the INRMP are not contributing to the cumulative effects of development expected to occur outside the Depot?	Weinrich	yes; clarified
3				**Integrated Natural Resource Management Plan Comments**		
4				Approving Official: Jennifer M. Norris Title: Field Supervisor	Weinrich	inserted
5	4	23	1.5.4.1	Suggest changing Sacramento Office to Sacramento Fish and Wildlife Office as there are three separate USFWS offices in Sacramento.	Weinrich	changed
6	15	16	3.4	Suggest rewriting this sentence to: In order to minimize adverse effects to federally-listed species, USFWS could identify changes or additional minimization measures that could result in delays and additional costs.	Weinrich	rewritten
7	15	26-27	3.4	Suggest deleting the last sentence of this section and replace it with: The USFWS should be contacted prior to undertaking activities which could lead to "take" of migratory birds.	Weinrich	replaced
8	26	18	4.6.2	Change Appendix D to Appendix E	Weinrich	changed
9	27	18	4.6.3	Suggest adding MBTA to the end of this sentence.	Weinrich	reference to MBTA added
10	27	32	4.6.3.1	We believe there is the "potential" for San Joaquin kit fox to occur at the Depot even though it has not been observed there. CNDDB records show SJKF about 2 miles from the Depot.	Weinrich	reference to the potential for SJKF to occur added

USFWS Comment Response Matrix DRAFT Integrated Natural Resource Management Plan and Environmental Assessment for Defense Distribution Center, San Joaquin, California						
#	Location			Comment	Reviewer	HDR Response
	Page	Line	Section			
11	27	35	4.6.3	Note: Tri-colored blackbird has been petitioned for listing under the Federal ESA. The USFWS completed a 90 day finding for the species and found the petition presents substantial information indicating listing may be warranted However, the effort to determine if it is warranted has not yet started.	Weinrich	added
12	28		Tble 4-2	Note: Tricolored blackbird Comment section: Suggest adding "during the nesting season" at the end of this sentence.	Weinrich	added
13	28		Tble 4-2	Note: San Joaquin kit fox Comment section: Suggest replacing the existing comment with: This species can occur in or near urban and agricultural areas, as well as grasslands.	Weinrich	replaced
14	42	32	5.2.1	Suggest conducting specific surveys for San Joaquin kit fox. San Joaquin kit fox may be a transient species on the Depot and may only be detected using remote sensing devices such as trail cameras. USFWS is interested in assisting depending on the need through a reimbursable agreement. [See page 48 section 5.5.3 External Assistance Action 3]	Weinrich	added
15	45	5.2.4	22	February overlaps the breeding season for burrowing owls, see bullet 3 in same section. The use of treated grain should be restricted to exclude use during the nesting season Feb1 to Aug 31.	Weinrich	February removed
16	48	5.5.5	19	USFWS is interested in assisting depending on the need through a reimbursable agreement. [See page 48 section 5.5.3 External Assistance Action 3]	Weinrich	added
17	49	22	5.7.1	Suggest use of native pollinator species as desired to replace "weed" species.	Weinrich	added

USFWS Comment Response Matrix
DRAFT Integrated Natural Resource Management Plan and Environmental Assessment for Defense Distribution Center, San Joaquin, California

#	Location			Comment	Reviewer	HDR Response
	Page	Line	Section			
18	50	5.8.2	29	For landscaping we suggest using native pollinator species to greatest extent possible (Action 3). The Presidential memorandum (Creating a Federal Strategy to Promote the Health of Honey Bee and Other Pollinators dated June 23, 2014) specifically directs the Department of Defense to "consistent with law and the availability of appropriations, support habitat restoration projects for pollinators, and shall direct military service installations to use, when possible, pollinator-friendly native landscaping and minimize use of pesticides harmful to pollinators through integrated vegetation and pest management practices."	Weinrich	added; also added to Section 4.6.5

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

September 14, 2015

Ms. Tanya Sheya
North Central Region
California Department of Fish and Wildlife
1701 Nimbus Road
Rancho Cordova, CA 95670

Dear Ms. Sheya:

HDR, Inc. has been contracted to prepare an Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) on behalf of Defense Logistics Agency's Defense Distribution Depot, San Joaquin (Depot) located in San Joaquin County in the city of Tracy. This document development is in accordance with the Sikes Act Improvement Amendment of 1997 (*16 United States Code [U.S.C.] 670a et seq.*). Per Executive Order 12372, *Intergovernmental Review of Federal Programs* and to promote collaboration during INRMP/EA development, the Depot Environmental Office is notifying various agencies and groups that have an interest in the Depot and the management of their resources in addition to CDFW, including the U.S. Fish and Wildlife Service Pacific Southwest Region's Sacramento Office and the California Native American Heritage Commission. We request your participation in the review of the INRMP/EA when available for agency review in February 2016.

HDR, Inc. will be requesting an Official Species List from the regulatory documents section per the unofficial *USFWS Information for Planning and Conservation Trust Resource Report* generated online in July 2015. Additionally, we would like to request from CDFW a current listing and the location of threatened, endangered, or otherwise sensitive species known to occur on or in proximity to the Depot. This information will be incorporated into the INRMP and will be cited by reference. If applicable, exact locations of endangered or threatened species will not be included with any document that is publicly reviewed. We look forward to a continued working relationship with the California Department of Fish and Wildlife, Region II. Thank you for your assistance.

If you have any questions, please contact the undersigned at (209) 839-4081.

Sincerely,

James A. Paslak

JAMES A. PASLAK
Environmental Protection Specialist

Enclosures

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

June 23, 2016

Kyle Stoner
North Central Region
California Department of Fish and Wildlife
1701 Nimbus Rd
Rancho Cordova, CA 95670

Subject: Draft Integrated Natural Resources Management Plan and Environmental Assessment (INRMP) for the Defense Logistic Agency's Defense Distribution Depot, San Joaquin (Depot)

Dear Mr. Stoner,

Thank you for your response to our letter sent on 14 September 2015 notifying CDFW of the development of the Defense Logistics Agency's Defense Distribution Depot, San Joaquin (Depot) Integrated Natural Resources Management Plan and Environmental Assessment (INRMP). As a result of that correspondence, both the BIOS and CNDDB tools were used during the development of the INRMP.

The Depot is pleased to provide for your review and comment the Draft INRMP. This document was prepared in compliance with the Sikes Act and its amendments to include the coordination of this document with the CDFW. Please find enclosed one electronic copy (on CD) of the INRMP. This INRMP has also been sent to Mr. Douglas Weinrich in the U.S. Fish and Wildlife Service Sacramento Field Office for review and comment.

Please provide comments and recommendations on the Draft INRMP/EA by 20 July 2016, using the Comment Response Matrix (CRM) included on the CD. The CRM is a tool for tracking comments received, preparing responses, and monitoring changes in the INRMP. Comments should be submitted to Katherine Crosthwaite via e-mail (Katherine.Crosthwaite@hdrinc.com).

Should you have any questions about the document or the review process, please contact Kate Crosthwaite at 512.589.9500.

Sincerely,

James A. Paslak

JAMES A. PASLAK
Environmental Protection Specialist

Distribution: Brenda Mahan, DLA
Rebecca Ralston, HDR

CDFW Comment Response Matrix Draft Integrated Natural Resources Management Plan and Environmental Assessment for DLA Defense Distribution Depot San Joaquin, CA						
#	Location			Comment	Reviewer	HDR Response
	Page	Line	Section			
1	Signature Page			the signatory for CDFW should be James Starr, Environmental Program Manager	*MF*	Inserted James Starr as signatory for CDFW
2			1.5.4.1	subsection for CDFW - last sentence should read that the CDFW office with responsibility is the "Bay Delta Region in Napa, California".	*MF*	replaced
3	46		5.2.4	Recommend that regular mowing or grazing be included in areas that support burrowing owls to prevent invasive plants from growing over approximately 5-inches in height.	*MF*	Inserted as Action 4: Outside of the nesting period (1 February through 31 August), mow areas that support borrowing owls to prevent invasive plants from reaching a height of approximately 5 inches.

CDFW Comment Response Matrix Draft Integrated Natural Resources Management Plan and Environmental Assessment for DLA Defense Distribution Depot San Joaquin, CA						
#	Location			Comment	Reviewer	HDR Response
	Page	Line	Section			
4	46		5.2.4	Recommend if possible that lands surrounding the area where burrowing owls occur be set aside for conservation/resource management purposes, if not then would recommend that some of the agricultural lands be set aside and managed for this purpose in a manner compatible with mission activities. *This statement was followed up with a phone conservation between MF and Kate Crosthwaite, HDR in order to clarify intent of the comment (30 March 2018).*	*MF*	Added as Actions 7, 8, and 9: 7. Conduct a biological feasibility study to explore the potential for setting aside a portion of the agricultural annex for burrowing owl habitat. This study should include an assessment of current and past inhabited areas, short and long-term recommendations for managing or restoring those areas to suitable habitat conditions, and an analysis of the appropriate size and configuration of land that would be biologically meaningful for burrowing owl conservation. 8. Conduct a logistical and financial feasibility study to determine the potential for setting aside a portion of the agricultural annex for burrowing owl habitat conservation (e.g., agricultural lease renewal schedules, potential mission impacts, integration with the Installation Master Plan). 9. Ensure collaboration with CDFW and USFWS regarding burrowing owl habitat management planning during the annual INRMP review.

CDFW Comment Response Matrix Draft Integrated Natural Resources Management Plan and Environmental Assessment for DLA Defense Distribution Depot San Joaquin, CA						
#	Location			Comment	Reviewer	HDR Response
	Page	Line	Section			
5	46		5.2.4	Recommend including management that supports ground squirrels and their burrows in areas that have been identified where there would be no conflict with mission activities and supporting burrowing owls.	*MF*	Added as Action 10: In order to facilitate habitat for burrowing owls, proactively manage for the presence of ground squirrels when not in conflict with the military mission.
6	46		5.2.4	Action 5 - Broadcast baiting should not be allowed due to poisoning of non-target wildlife throughout the site. Recommend bait stations or mechanical methods.	*MF*	Added to Action 5 (now Action 6): Avoid fumigation of any animal burrows. Do not use treated bait or other means of poisoning nuisance animals in areas where burrowing owls are known or suspected to occur (e.g., sites observed with nesting owls, foraging habitat). Restrict the use of treated grain to poison mammals in areas outside of burrowing owl habitat, only apply during the month of January, and use only when integrated pest management options are not effective (e.g., mechanical methods). Broadcast baiting is not permitted; if use of treated grain is necessary, use bait stations and only place stations outside of burrowing owl habitat.
7	50		5.6	Recommend including as a management objective increasing occurrence of native flowering plants during all seasons to support declining populations of pollinator species	*MF*	Added to Action 3: Implement recommendations from erosion survey. Reseed with predominantly native seed. Use native pollinator species to the greatest extent possible per the Presidential Memorandum that directs DOD to use pollinator-friendly native landscaping and minimize use of pesticides harmful to pollinators.

CDFW Comment Response Matrix Draft Integrated Natural Resources Management Plan and Environmental Assessment for DLA Defense Distribution Depot San Joaquin, CA						
#	Location			Comment	Reviewer	HDR Response
	Page	Line	Section			

Reviewer: MF, Melissa Farinha, Senior Environmental Scientist (Supervisory), Bay Delta Region, Habitat Conservation Unit, 7329 Silverado Trail, Napa, CA 94558; 707-944-5579; melissa.farinha@wildlife.ca.gov, comments provided 23 January 2018

-----Original Message-----
From: Farinha, Melissa@Wildlife [mailto:Melissa.Farinha@wildlife.ca.gov]
Sent: Tuesday, January 23, 2018 7:46 PM
To: Crosthwaite, Kate <Kate.Crosthwaite@hdrinc.com>
Cc: Paslak, James A CIV DLA INSTALLATION SUPPORT (US) <James.Paslak@dla.mil>
Subject: RE: DLA San Joaquin Depot INRMP Review Request

Hi Kate,
I have reviewed the draft INRMP for the San Joaquin Depot and have the following comments:

Signatory Page - the signatory for CDFW should be James Starr, Environmental Program Manager.

Section 1.5.4.1, subsection for CDFW - last sentence should read that the CDFW office with responsibility is the "Bay Delta Region in Napa, California".

Section 5.2.4 - Recommend that regular mowing or grazing be included in areas that support burrowing owls to prevent invasive plants from growing over approximately 5-inches in height.

Section 5.2.4 - Recommend if possible that lands surrounding the area where burrowing owls occur be set aside for conservation/resource management purposes, if not then would recommend that some of the agricultural lands be set aside and managed for this purpose in a manner compatible with mission activities.

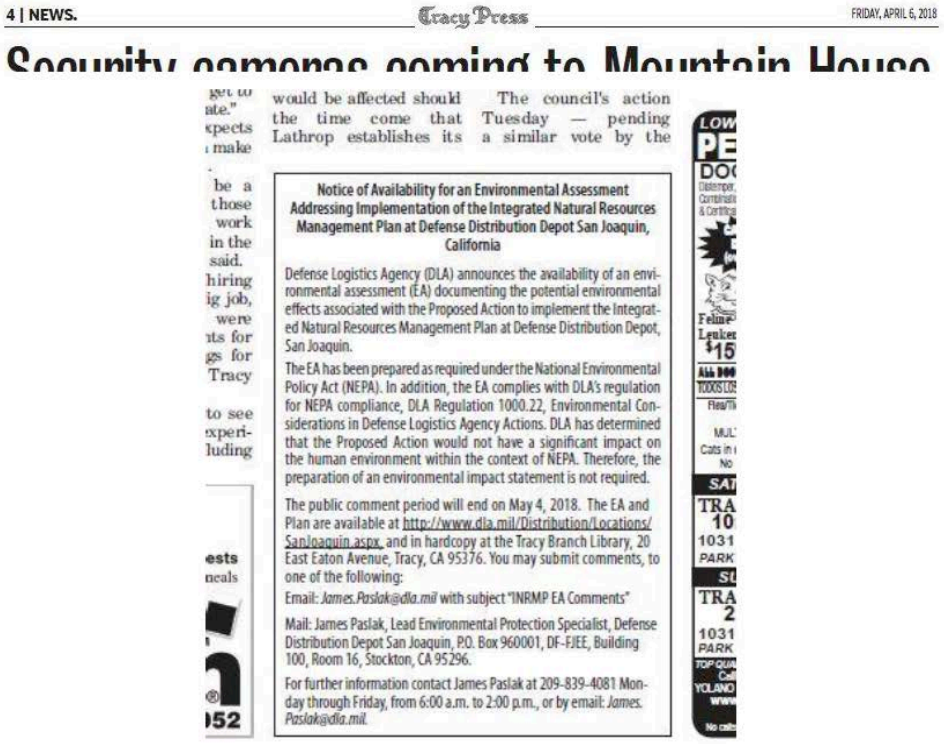
Section 5.2.4 - Recommend including management that supports ground squirrels and their burrows in areas that have been identified where there would be no conflict with mission activities and supporting burrowing owls.

Section 5.2.4, Action 5 - Broadcast baiting should not be allowed due to poisoning of non-target wildlife throughout the site. Recommend bait stations or mechanical methods.

Section 5.6 - Recommend including as a management objective increasing occurrence of native flowering plants during all seasons to support declining populations of pollinator species.

Thank You,

Melissa Farinha
Senior Environmental Scientist (Supervisory) Bay Delta Region, Habitat Conservation Unit
7329 Silverado Trail
Napa, CA 94558
(707) 944-5579



4 | NEWS. Tracy Press FRIDAY, APRIL 6, 2018

Security cameras coming to Mountain House

would be affected should the time come that Lathrop establishes its

The council's action Tuesday — pending a similar vote by the

Notice of Availability for an Environmental Assessment Addressing Implementation of the Integrated Natural Resources Management Plan at Defense Distribution Depot San Joaquin, California

Defense Logistics Agency (DLA) announces the availability of an environmental assessment (EA) documenting the potential environmental effects associated with the Proposed Action to implement the Integrated Natural Resources Management Plan at Defense Distribution Depot, San Joaquin.

The EA has been prepared as required under the National Environmental Policy Act (NEPA). In addition, the EA complies with DLA's regulation for NEPA compliance, DLA Regulation 1000.22, Environmental Considerations in Defense Logistics Agency Actions. DLA has determined that the Proposed Action would not have a significant impact on the human environment within the context of NEPA. Therefore, the preparation of an environmental impact statement is not required.

The public comment period will end on May 4, 2018. The EA and Plan are available at http://www.dla.mil/Distribution/Locations/SanJoaquin.aspx, and in hardcopy at the Tracy Branch Library, 20 East Eaton Avenue, Tracy, CA 95376. You may submit comments, to one of the following:

Email: *James.Paslak@dla.mil* with subject "INRMP EA Comments"

Mail: James Paslak, Lead Environmental Protection Specialist, Defense Distribution Depot San Joaquin, P.O. Box 960001, DF-FJEE, Building 100, Room 16, Stockton, CA 95296.

For further information contact James Paslak at 209-839-4081 Monday through Friday, from 6:00 a.m. to 2:00 p.m., or by email: *James.Paslak@dla.mil.*

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Marybell Orejel who said at first she didn't want to go to the classes but the

Camarena Health Registered dietitian and health educator made the class

Aviso de Disponibilidad de una Evaluación Ambiental Abordando la Implementación del Plan de Getión Integrada de los Recursos Naturales en el Almacén de Distribución de Defensa San Joaquín, California

La Agencia de Logística de Defensa (DLA, por sus siglas en inglés) anuncia la disponibilidad de una evaluación ambiental (EA) sobre los impactos ambientales potenciales asociados con la Acción Propuesta de implementar un Plan de Getión Integrada de los Recursos Naturales en el Almacén de Distribución de Defensa, San Joaquín.

La EA se ha elaborado según lo requerido por la Ley Nacional de Política Ambiental (NEPA, por sus siglas en inglés) (1969). Además, la EA cumple con el Reglamento DLA 1.000.22. DLA ha determinado que la Acción Propuesta no tendría impacto significativo sobre el medio ambiente en el contexto de la NEPA. Por lo tanto, no se requiere la preparación de una declaración de impacto ambiental.

El período de comentario público terminará en 4 de Mayo de 2018. La EA está disponible a http://www.dla.mil/Distribution/Locations/SanJoaquin.aspx y copias de la EA también están disponibles en la Biblioteca de Tracy, 20 East Eaton Avenue, Tracy, CA 95376. Usted puede presentar comentarios de la manera siguiente:

Correo Electrónico: James.Paslak@dla.mil

Correo: James Paslak, Lead Environmental Protection Specialist, Defense Distribution Depot San Joaquin, P.O. Box 960001, DF-FJEE, Building 100, Room 16, Stockton, CA 95296.

Para mayor información contactar a James Paslak al 209-839-4081 de lunes a viernes de 8:00 a.m. a 4:30 p.m. (EST), o por correo electrónico: James.Paslak@dla.mil.

STATE OF CALIFORNIA — Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX

October 19, 2015

Monica Mackey
Hydropower Services

Sent by Email: monica.mackey@~~hdri.com~~ hdrinc.com
Number of Pages: 3

RE: Native American Consultation, Pursuant to Public Resources Code Sections 21080.1, 21080.3.1 and 21080.3.2, Defense Distribution Depot San Joaquin Integrated Natural Resources Management Plan

Dear Ms. Mackey:

As of July 1, 2015, Public Resources Code Sections 21080.1, 21080.3.1 and 21080.3.2 require public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

> Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law. Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the potential "area of project affect" (APE).

In accordance with Public Resources Code Section 21080.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;

- If the probability is low, moderate, or high that cultural resources are located in the APE.
- Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:
   - Any report that may contain site forms, site significance, and suggested mitigation measurers.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure in accordance with Government Code Section 6254.10.

3. A search of the NAHC Sacred Lands File was completed for the APE referenced above. Please note that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American traditional cultural places or cultural landscapes in any APE. While in this case, a search of the NAHC Sacred Lands File did not indicate the presence of any sites within the APE you provided, a Native American tribe or individual may be the only source for the presence of traditional cultural places. Enclosed is a list of Native American individuals/organizations who may have knowledge of traditional cultural places in your project area. This list should provide a starting place in locating any areas of potential adverse impact.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at dpt_nahc@pacbell.net

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

Native American Heritage Commission
Tribal Consultation List
San Joaquin County
October 12, 2015

Buena Vista Rancheria
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk / Miwok
Sacramento , CA 95811
rhonda@buenavistatribe.com
(916) 491-0011 Office

Ione Band of Miwok Indians
Dr. Crystal Martinez, Chairperson
P.O. Box 699 — Miwok
Plymouth , CA 95669
administrator@ionemiwok.org
(209) 245-5800 Office

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden , CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

Southern Sierra Miwuk Nation
Lois Martin, Chairperson
P.O. Box 186 — Miwok
Mariposa , CA 95338 — Pauite
Northern Valley Yokut
(209) 742-6867 Office

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove , CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Defense Distribution Depot San Joaquin Integrated Natural Resources Management Plan, San Joaquin County

Identification and Evaluation of Historic Properties:

Over the last two decades, numerous cultural resources surveys and investigations have been conducted at the Depot; the most recent in 2012. During the 2012 survey and evaluation, 20 utilitarian structures with no significant associations were identified and evaluated using the Advisory Council of Historic Preservation's implementing guidelines (36 CFR § 800) and the National Register of Historic Places (NRHP) criteria set forth in 36 CFR § 60. Based on the most recent findings and previous studies, DLA Installation Support San Joaquin, with concurrence from the California State Historic Preservation Office, has determined that none of the buildings at the installation constructed prior to 1968 are *Eligible* for listing in the NRHP, and therefore, do not qualify as *historic properties* (54 U.S.C. § 302103 and 36 CFR § 800.4). The potential presence of archaeological sites were considered and determined to be low based on the extensive development and ground disturbance resulting from construction of the Depot during the 1940s. Since the Depot contains no *historic properties* and the potential presence of archaeological sites is low, the Depot has an Integrated Cultural Resource Management Plan (ICRMP) variance, in accordance with DLA Instruction 4108, *Natural and Cultural Resources Conservation Program*.

Finding of No Historic Properties Affected:

Based on the negative findings from previous studies, establishment of an ICRMP variance, limited nature of the Proposed Action, and because the area has been highly disturbed from previous construction, DLA has determined that no *historic properties* will be affected by the Proposed Action. DLA requests your concurrence with this determination.

In accordance with Section 106 and Section 110 of the NHPA, DLA has notified Tribal governments of its determination (see enclosure 3), as well as, the Native American Heritage Commission. The following Tribal representatives were notified:

- Buena Vista Rancheria, California
- Ione Band of Miwok Indians, California
- North Valley Yokuts Tribe, California
- Southern Sierra Miwuk Nation, California
- Wilton Rancheria, California
- United Auburn Indian Community of the Auburn Rancheria.

Enclosed is a topographic map showing the project location (the Depot), a copy of a sample Tribal consultation letter, and an electronic copy of the full cultural resources inventory report on a CD (see enclosure 4). This letter serves as our project initiation and coordination in accordance with 36 CFR § 800.3(g), and we are requesting an expedited review of the following:

1) Review and Comment on Area of Potential Effect
2) Review and Comment on Identification Efforts
3) SHPO Concurrence with DLA Determination of No Historic Properties Affected

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

April 2, 2018

Historian, Office of Historic Preservation California
Department of Parks and Recreation
Attn: Tristan Tozer
1725 23rd Street, Suite 100
Sacramento, CA 95816

Re: Proposed Implementation of the Integrated Natural Resources Management Plan at Defense Distribution Depot San Joaquin, San Joaquin County, Tracy, California

Dear Tristan Tozer,

Pursuant to Section 106 and Section 110 of the National Historic Preservation Act (NHPA) (54 United States Code [U.S.C.] § 306108 and § 306102) and its implementing regulations, 36 Code of Federal Regulations (CFR) § 800, the Defense Logistics Agency (DLA) is transmitting this letter and enclosures to initiate consultation for the Proposed Action referenced above. DLA proposes to implement the Integrated Natural Resources Management Plan (INRMP) at Defense Distribution Depot San Joaquin in Tracy, California (Depot) (see enclosure 1) which would guide the management of natural resources for 5 years (fiscal years 2018-2022). The Proposed Action is necessary, in order to be consistent with the Sikes Act Improvement Act of 1997, as amended through 2010 (16 United States Code [USC] 670a et seq.), which requires the preparation, implementation, update, and review of an INRMP for each military installation in the United States and its territories with significant natural resources. Defense Logistics Agency Instruction 4108, *Natural and Cultural Resources Conservation Program* defines the INRMP as a required tool used to implement the natural resources management program.

The implementation of the INRMP would result in a comprehensive natural resources management strategy for the Depot that represents compliance, restoration, prevention, and conservation; initiates a cohesive management approach for natural resources on the Depot; meets legal and policy requirements consistent with national natural resources management philosophies; and integrates natural resources management with other activities at the Depot.

Description of Undertaking:

The Proposed Action, the implementation of the INRMP, would result in the implementation of the natural resources management actions identified in the plan. The INRMP is based on an integrated approach to ecosystem management and addresses wildlife and vegetation goals and objectives, as well as the water and soil resources.

The Depot is required by federal law (e.g., Sikes Act, Endangered Species Act, and Clean Water Act), Department of Defense, and DLA regulations and instructions to conserve and enhance native ecosystems and environments, including sensitive species, and to maximize public outdoor recreational opportunities within constraints of the military mission. The Sikes Act mandates not only the preparation of an INRMP but also the implementation of the management activities contained in the plan. According to the Sikes Act, the conservation program must be consistent with the mission-essential use of the installation and its lands and cause no net loss of military land use. The Depot INRMP has been prepared to meet natural resources regulatory requirements while ensuring no net loss in the capability of military lands to support the military mission of the Depot.

Identification and Evaluation of Historic Properties:

Over the last two decades, numerous cultural resources surveys and investigations have been conducted at the Depot; the most recent in 2012. During the 2012 survey and evaluation, 20 utilitarian structures with no significant associations were identified and evaluated using the Advisory Council of Historic Preservation's implementing guidelines (36 CFR § 800) and the National Register of Historic Places (NRHP) criteria set forth in 36 CFR § 60. Based on the most recent findings and previous studies, DLA Installation Support San Joaquin, with concurrence from the California State Historic Preservation Office, has determined that none of the buildings at the installation constructed prior to 1968 are *Eligible* for listing in the NRHP, and therefore, do not qualify as *historic properties* (54 U.S.C. § 302103 and 36 CFR § 800.4). The potential presence of archaeological sites were considered and determined to be low based on the extensive development and ground disturbance resulting from construction of the Depot during the 1940s. Since the Depot contains no *historic properties* and the potential presence of archaeological sites is low, the Depot has an Integrated Cultural Resource Management Plan (ICRMP) variance, in accordance with DLA Instruction 4108, *Natural and Cultural Resources Conservation Program*.

Finding of No Historic Properties Affected:

Based on the negative findings from previous studies, establishment of an ICRMP variance, limited nature of the Proposed Action, and because the area has been highly disturbed from previous construction, DLA has determined that no *historic properties* will be affected by the Proposed Action. DLA requests your concurrence with this determination.

In accordance with Section 106 and Section 110 of the NHPA, DLA has notified Tribal governments of its determination (see enclosure 3), as well as, the Native American Heritage Commission. The following Tribal representatives were notified:

- Buena Vista Rancheria, California
- Ione Band of Miwok Indians, California
- North Valley Yokuts Tribe, California
- Southern Sierra Miwuk Nation, California
- Wilton Rancheria, California
- United Auburn Indian Community of the Auburn Rancheria.

Enclosed is a topographic map showing the project location (the Depot), a copy of a sample Tribal consultation letter, and an electronic copy of the full cultural resources inventory report on a CD (see enclosure 4). This letter serves as our project initiation and coordination in accordance with 36 CFR § 800.3(g), and we are requesting an expedited review of the following:

1) Review and Comment on Area of Potential Effect
2) Review and Comment on Identification Efforts
3) SHPO Concurrence with DLA Determination of No Historic Properties Affected

Your prompt attention to this request is greatly appreciated. If DLA has not received a response from your office within 30 days of your receipt of this determination letter, DLA will consider its responsibilities under Section 106 to have been fulfilled. Written correspondence may be submitted by mail to the following address:

Mr. James Paslak
Lead Environmental Protection Specialist Defense
Distribution Depot San Joaquin
P.O. Box 960001 DF-FJEE
Building 100, Room 16
Stockton, CA 95296

We look forward to continuing the Section 106 consultation process with you. If you require additional information or have any questions or concerns, please feel free to contact Mr. James Paslak by telephone at (209) 839-4081 or by email at James.Paslak@dla.mil.

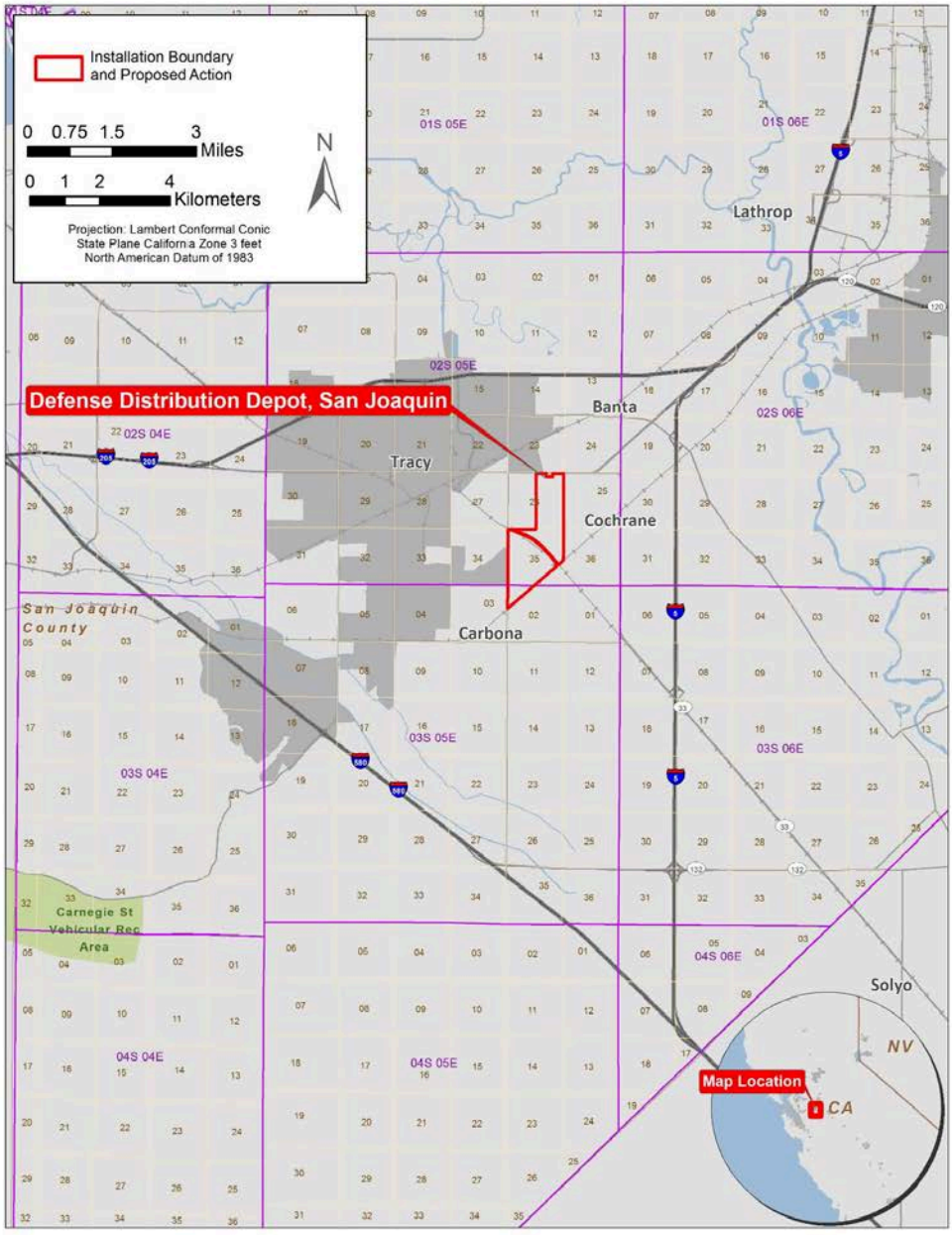
Sincerely,

James A. Paslak

James Paslak

Lead Environmental Protection Specialist Defense
Distribution Depot San Joaquin

Enclosure 1: Project Location
Enclosure 2: Copy of Sample Letter Sent to Tribes
Enclosure 3: Full Inventory Report (CD)


Installation Boundary and Proposed Action
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Cochrane
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03S 06E
04S 04E
04S 05E
04S 06E

North Valley Yokuts Tribe
Ms. Katherine Erolinda Perez
Chairperson
P.O. Box 717
Linden, CA 95236

Subject: Draft Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Ms. Perez,

The Defense Logistics Agency (DLA) and the Defense Distribution Depot San Joaquin (Tracy, CA) have prepared a Draft INRMP and EA for the Depot. The INRMP directs management of natural resources on the Depot and provides guidance on compliance with federal laws and regulations governing those resources. The EA documents the potential environmental effects associated with the Proposed Action to implement the INRMP.

The EA was drafted in accordance with DLA's regulation for National Environmental Policy Act (NEPA) compliance, DLA Regulation 1000.22, *Environmental Considerations in Defense Logistics Agency Actions*. DLA has determined that the Proposed Action would not have a significant impact on the human environment within the context of NEPA; therefore, the preparation of an environmental impact statement is not required.

Pursuant to Public Resources Code Sections 21080.1, 21080.3.1, and 21080.3.2, DLA has consulted with the Native American Heritage Commission (NAHC) for the purpose of mitigating impacts to tribal cultural resources. Based on the results of consultation with NAHC, DLA would like to provide the opportunity to comment on the EA which is available at http://www.dla.mil/Distribution/Locations/SanJoaquin.aspx; and in hardcopy at the Tracy Branch Library, 20 East Avenue, Tracy, CA 95376.

You may submit comments on the Proposed Action via email to: Mr. James Paslak at James.Paslak@dla.mil. Or you may submit comments on the Proposed Action by mail to: Mr. James Paslak, Defense Distribution Depot San Joaquin, P.O. Box 960001, Building 100, Room 16, Stockton, CA 95296. For further information contact Mr. James Paslak at 209-839-4081 or by email at James.Paslak@dla.mil. Thank you for your participation.

State of California • Natural Resources Agency
Edmund G. Brown Jr., *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo@parks.ca.gov www.ohp.parks.ca.gov

Julianne Polanco, *State Historic Preservation Officer*

April 30, 2017

Reply In Reference to: DLA_2018_0405_001

James Paslak
Lead Environmental Protection Specialist
Defense Distribution Depot San Joaquin
P.O. Box 960001 DF-FJEE
Building 100, Room 16
Stockton, CA 95296-0001

RE: Proposed Implementation of the Integrated Natural Resources Management Plan (INRMP) at Defense Distribution Depot San Joaquin, Tracy, San Joaquin County, California

Dear Mr. Paslak:

The Defense Logistics Agency (DLA) is consulting with the California State Historic Preservation Officer (SHPO). The FAA does so in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108), as amended. The DLA is of the opinion that implementing the INRMP will not affect historic properties will not affect historic properties and is requesting SHPO concurrence with this finding.

DLA intends to implement a five-year INRMP. The INRMP will result in a comprehensive natural resources management strategy for the Depot that represents compliance, restoration, prevention, and conservation; initiates a cohesive management approach for natural resources; meets legal and policy requirements consistent with national natural resources management philosophies; and integrates natural resources management with other activities at the Depot.

In addition to your April 2, 2018 letter, DLA has provided a map showing the boundary of DLA San Joaquin and a summary of cultural resource of the installation taken to date.

Having reviewed DLA's submittal, SHPO cannot comment on the potential for the INRMP to affect historic resources, as no plan was included with the documentation provided. Please provide SHPO with a copy of the plan if DLA would like comments.

Should the DLA have any questions or comments, please contact the State Historian Tristan Tozer at (916) 445-7027 or at Tristan.Tozer@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Crosthwaite, Kate

From: Paslak, James A CIV DLA INSTALLATION SUPPORT (US) <James.Paslak@dla.mil>
Sent: Tuesday, May 1, 2018 12:12 PM
To: Tozer, Tristan@Parks
Cc: Crosthwaite, Kate
Subject: RE: SHPO comments on Distribution Depot San Joaquin INRMP

The link to the complete plan is below. In the left hand column for the Notice of Availability and Environmental Assessment and the link below that for the Integrated Natural Resources Management Plan.

http://www.dla.mil/Distribution/Locations/SanJoaquin.aspx

Thanks!

James A. Paslak
Lead Environmental Protection Specialist
DLA Installation Support San Joaquin
(209) 839-4081

Please consider the environment before printing this email

From: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Sent: Tuesday, May 1, 2018 9:45 AM
To: Paslak, James A CIV DLA INSTALLATION SUPPORT (US) <James.Paslak@dla.mil>
Subject: [Non-DoD Source] SHPO comments on Distribution Depot San Joaquin INRMP

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Hi James,

Attached is PDF of our comments letter.

Cheers,

Tristan Tozer
Historian, Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
Voicemail: (916) 445-7027

1

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

April 2, 2018

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse
Chairperson
10720 Indian Hill Road
Auburn, CA 95603

Subject: Draft Integrated Natural Resources Management Plan (INRMP) Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Mr. Whitehouse,

The Defense Logistics Agency (DLA) and the Defense Distribution Depot San Joaquin (Tracy, CA) have prepared a Draft INRMP and EA for the Depot. The INRMP directs management of natural resources on the Depot and provides guidance on compliance with federal laws and regulations governing those resources. The EA documents the potential environmental effects associated with the Proposed Action to implement the INRMP.

The EA was drafted in accordance with DLA's regulation for National Environmental Policy Act (NEPA) compliance, DLA Regulation 1000.22, *Environmental Considerations in Defense Logistics Agency Actions*. DLA has determined that the Proposed Action would not have a significant impact on the human environment within the context of NEPA; therefore, the preparation of an environmental impact statement is not required.

Pursuant to Public Resources Code Sections 21080.1, 21080.3.1, and 21080.3.2, DLA has consulted with the Native American Heritage Commission (NAHC) for the purpose of mitigating impacts to tribal cultural resources. Based on the results of consultation with NAHC, DLA would like to provide the opportunity to comment on the EA which is available at http://www.dla.mil/Distribution/Locations/SanJoaquin.aspx; and in hardcopy at the Tracy Branch Library, 20 East Avenue, Tracy, CA 95376.

You may submit comments on the Proposed Action via email to: Mr. James Paslak at James.Paslak@dla.mil. Or you may submit comments on the Proposed Action by mail to: Mr. James Paslak, Defense Distribution Depot San Joaquin, P.O. Box 960001, Building 100, Room 16, Stockton, CA 95296. For further information contact Mr. James Paslak at 209-839-4081 or by email at James.Paslak@dla.mil. Thank you for your participation.

Sincerely,
James A. Paslak
James Paslak
Lead Environmental Protection Specialist

MIWOK MAIDU United Auburn Indian Community of the Auburn Rancheria

Gene Whitehouse, Chairman | John L. Williams, Vice Chairman | Calvin Moman, Secretary | Jason Camp, Treasurer | Gabe Cayton, Council Member

April 24, 2018

James Paslak
Defense Distribution Depot San Joaquin
P.O. Box 960001, Building 100, Room 16
Stockton, CA 95296

Subject: Draft Integrated Natural Resources Management Plan Environmental Assessment for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear James Paslak,

Thank you for requesting information regarding the above referenced project. The United Auburn Indian Community (UAIC) of the Auburn Rancheria is comprised of Miwok and Southern Maidu (Nisenan) people whose tribal lands are within Placer County and whose service area includes El Dorado, Nevada, Placer, Sacramento, Sutter, and Yuba counties. The UAIC is concerned about development within its aboriginal territory that has potential to impact the lifeways, cultural sites, and landscapes that may be of sacred or ceremonial significance. We appreciate the opportunity to comment on this and other projects. The UAIC would like to consult on this project.

In order to ascertain whether the project could affect cultural resources that may be of importance to the UAIC, we would like to receive copies of any archaeological reports that are completed for the project. We also request copies of environmental documents for the proposed project so that we have the opportunity to comment on appropriate identification, assessment and mitigation related to cultural resources. Finally, we request and recommend that UAIC tribal representatives observe and participate in all cultural resource surveys. To assist in locating and identifying cultural resources, UAIC's Preservation Department offers a mapping, records and literature search services program. This program has been shown to assist project proponents in complying with applicable environmental protection laws and choosing the appropriate mitigation measures or form of environmental documentation during the planning process. If you are interested in the program, please let us know.

The UAIC's Preservation Committee would like to set up a meeting or site visit, and begin consulting on the proposed project. Based on the Preservation Committee's identification of cultural resources in and around your project area, the UAIC recommends that a tribal monitor be present during any ground disturbing activities. Thank you again for taking these matters into consideration, and for involving the UAIC early in the planning process. We look forward to reviewing the documents requested above and consulting on your project. Please contact Marcos Guerrero, Cultural Resources Manager, at (530) 883-2364 or by email at mguerrero@auburnrancheria.com if you have any questions.

Sincerely,

Gene Whitehouse,
Chairman

CC: Marcos Guerrero, CRM

Tribal Office 10720 Indian Hill Road Auburn, CA 95603 (530) 883-2390 FAX (530) 883-2380

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

May 21, 2018

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse
Chairperson
10720 Indian Hill Road
Auburn, CA 95603

Subject: Draft Integrated Natural Resources Management Plan (INRMP) Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Mr. Whitehouse,

Thank you for taking the time to respond to our request for comments related to the publication of an Integrated Natural Resources Management Plan (INRMP) for Defense Distribution Depot San Joaquin in San Joaquin, California. This planning document outlines how the Defense Logistics Agency will manage natural resources at this installation. In consideration of your interest to consult on this project, we will update Section 6, "INRMP Implementation Process" to acknowledge your role in the planning of specific projects that sustain military readiness while providing for effective management of natural resources.

As a planning document, the INRMP provides overall goals for resource management, but does not provide approval or funding for specific projects. Considering this fact, we recommend scheduling an initial meeting, at a mutually agreeable time and location, following the publication of the INRMP in June 2018. The purpose of this meeting would be to provide an opportunity for you to review the proposed Work Plan for Fiscal Year 2019 (October 1, 2018 through September 30, 2019), and ascertain whether specific proposed projects have the potential to affect cultural resources that may be of importance to the United Auburn Indian Community. Because the INRMP is a living document, this process would occur no less than annually.

Finally, we agree to initiate consultation when proposed projects require ground-disturbing activities or have the potential to result in other significant environmental impacts.

We look forward to meaningful consultations that provide efficient and effective management of natural resources without degradation or harm to tribal cultural or spiritual resources. If you have any questions, please do not hesitate to reach me at 209-839-4081 or by email at James.Paslak@dla.mil.

Sincerely,

James A. Paslak

James Paslak
Lead Environmental Protection Specialist

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

April 2, 2018

Buena Vista Rancheria
Mr. Mike DeSpain
Director/Tribal Historic Preservation Officer
1418 20th Street, Suite 200
Sacramento, CA 95811

Subject: Draft Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Mr. DeSpain,

The Defense Logistics Agency (DLA) and the Defense Distribution Depot San Joaquin (Tracy, CA) have prepared a Draft INRMP and EA for the Depot. The INRMP directs management of natural resources on the Depot and provides guidance on compliance with federal laws and regulations governing those resources. The EA documents the potential environmental effects associated with the Proposed Action to implement the INRMP.

The EA was drafted in accordance with DLA's regulation for National Environmental Policy Act (NEPA) compliance, DLA Regulation 1000.22, Environmental Considerations in Defense Logistics Agency Actions. DLA has determined that the Proposed Action would not have a significant impact on the human environment within the context of NEPA; therefore, the preparation of an environmental impact statement is not required.

Pursuant to Public Resources Code Sections 21080.1, 21080.3.1, and 21080.3.2, DLA has consulted with the Native American Heritage Commission (NAHC) for the purpose of mitigating impacts to tribal cultural resources. Based on the results of consultation with NAHC, DLA would like to provide the opportunity to comment on the EA which is available at http://www.dla.mil/Distribution/Locations/SanJoaquin.aspx; and in hardcopy at the Tracy Branch Library, 20 East Avenue, Tracy, CA 95376.

You may submit comments on the Proposed Action via email to: Mr. James Paslak at James.Paslak@dla.mil. Or you may submit comments on the Proposed Action by mail to: Mr. James Paslak, Defense Distribution Depot San Joaquin, P.O. Box 960001, Building 100, Room 16, Stockton, CA 95296. For further information contact Mr. James Paslak at 209-839-4081 or by email at James.Paslak@dla.mil. Thank you for your participation.

Sincerely,

James A. Paslak

James Paslak
Lead Environmental Protection Specialist

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

April 2, 2018

Buena Vista Rancheria
Ms. Rhonda Morningstar Pope
Chairperson
1418 20th Street, Suite 200
Sacramento, CA 95811

Subject: Draft Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Ms. Pope,

The Defense Logistics Agency (DLA) and the Defense Distribution Depot San Joaquin (Tracy, CA) have prepared a Draft INRMP and EA for the Depot. The INRMP directs management of natural resources on the Depot and provides guidance on compliance with federal laws and regulations governing those resources. The EA documents the potential environmental effects associated with the Proposed Action to implement the INRMP.

The EA was drafted in accordance with DLA's regulation for National Environmental Policy Act (NEPA) compliance, DLA Regulation 1000.22, Environmental Considerations in Defense Logistics Agency Actions. DLA has determined that the Proposed Action would not have a significant impact on the human environment within the context of NEPA; therefore, the preparation of an environmental impact statement is not required.

Pursuant to Public Resources Code Sections 21080.1, 21080.3.1, and 21080.3.2, DLA has consulted with the Native American Heritage Commission (NAHC) for the purpose of mitigating impacts to tribal cultural resources. Based on the results of consultation with NAHC, DLA would like to provide the opportunity to comment on the EA which is available at http://www.dla.mil/Distribution/Locations/SanJoaquin.aspx; and in hardcopy at the Tracy Branch Library, 20 East Avenue, Tracy, CA 95376.

You may submit comments on the Proposed Action via email to: Mr. James Paslak at James.Paslak@dla.mil. Or you may submit comments on the Proposed Action by mail to: Mr. James Paslak, Defense Distribution Depot San Joaquin, P.O. Box 960001, Building 100, Room 16, Stockton, CA 95296. For further information contact Mr. James Paslak at 209-839-4081 or by email at James.Paslak@dla.mil. Thank you for your participation.

Sincerely,

James A. Paslak

James Paslak
Lead Environmental Protection Specialist

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

April 2, 2018

Ione Band of Miwok Indians
Dr. Crystal Martinez-Alire
Chairperson
P.O. Box 699
Plymouth, CA 95669

Subject: Draft Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Ms. Martinez-Alire,

The Defense Logistics Agency (DLA) and the Defense Distribution Depot San Joaquin (Tracy, CA) have prepared a Draft INRMP and EA for the Depot. The INRMP directs management of natural resources on the Depot and provides guidance on compliance with federal laws and regulations governing those resources. The EA documents the potential environmental effects associated with the Proposed Action to implement the INRMP.

The EA was drafted in accordance with DLA's regulation for National Environmental Policy Act (NEPA) compliance, DLA Regulation 1000.22, Environmental Considerations in Defense Logistics Agency Actions. DLA has determined that the Proposed Action would not have a significant impact on the human environment within the context of NEPA; therefore, the preparation of an environmental impact statement is not required.

Pursuant to Public Resources Code Sections 21080.1, 21080.3.1, and 21080.3.2, DLA has consulted with the Native American Heritage Commission (NAHC) for the purpose of mitigating impacts to tribal cultural resources. Based on the results of consultation with NAHC, DLA would like to provide the opportunity to comment on the EA which is available at http://www.dla.mil/Distribution/Locations/SanJoaquin.aspx; and in hardcopy at the Tracy Branch Library, 20 East Avenue, Tracy, CA 95376.

You may submit comments on the Proposed Action via email to: Mr. James Paslak at James.Paslak@dla.mil. Or you may submit comments on the Proposed Action by mail to: Mr. James Paslak, Defense Distribution Depot San Joaquin, P.O. Box 960001, Building 100, Room 16, Stockton, CA 95296. For further information contact Mr. James Paslak at 209-839-4081 or by email at James.Paslak@dla.mil. Thank you for your participation.

Sincerely,

James A. Paslak

James Paslak
Lead Environmental Protection Specialist

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

April 2, 2018

Ione Band of Miwok Indians
Randy Yonemura
Cultural Committee Chair
P.O. Box 699
Plymouth, CA 95669

Subject: Draft Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Mr. Yonemura,

The Defense Logistics Agency (DLA) and the Defense Distribution Depot San Joaquin (Tracy, CA) have prepared a Draft INRMP and EA for the Depot. The INRMP directs management of natural resources on the Depot and provides guidance on compliance with federal laws and regulations governing those resources. The EA documents the potential environmental effects associated with the Proposed Action to implement the INRMP.

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Sincerely,
James A. Paslak
James Paslak
Lead Environmental Protection Specialist

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

April 2, 2018

North Valley Yokuts Tribe
Ms. Katherine Erolinda Perez
Chairperson
P.O. Box 717
Linden, CA 95236

Subject: Draft Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Ms. Perez,

The Defense Logistics Agency (DLA) and the Defense Distribution Depot San Joaquin (Tracy, CA) have prepared a Draft INRMP and EA for the Depot. The INRMP directs management of natural resources on the Depot and provides guidance on compliance with federal laws and regulations governing those resources. The EA documents the potential environmental effects associated with the Proposed Action to implement the INRMP.

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Sincerely,

James A. Paslak

James Paslak
Lead Environmental Protection Specialist

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

April 2, 2018

Southern Sierra Miwuk Nation
Ms. Lois Martin
Chairperson
P.O. Box 186
Mariposa, CA 95338

Subject: Draft Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Ms. Martin,

The Defense Logistics Agency (DLA) and the Defense Distribution Depot San Joaquin (Tracy, CA) have prepared a Draft INRMP and EA for the Depot. The INRMP directs management of natural resources on the Depot and provides guidance on compliance with federal laws and regulations governing those resources. The EA documents the potential environmental effects associated with the Proposed Action to implement the INRMP.

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Sincerely,

James A. Paslak

James Paslak
Lead Environmental Protection Specialist

DEFENSE LOGISTICS AGENCY
DLA INSTALLATION SUPPORT AT SAN JOAQUIN
P.O. BOX 960001
STOCKTON, CALIFORNIA 95296-0001

April 2, 2018

Wilton Rancheria
Mr. Raymond Hitchcock
Chairperson
9728 Kent Street
Elk Grove, CA 95624

Subject: Draft Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) for the Defense Logistic Agency's Defense Distribution Depot San Joaquin

Dear Mr. Hitchcock,

The Defense Logistics Agency (DLA) and the Defense Distribution Depot San Joaquin (Tracy, CA) have prepared a Draft INRMP and EA for the Depot. The INRMP directs management of natural resources on the Depot and provides guidance on compliance with federal laws and regulations governing those resources. The EA documents the potential environmental effects associated with the Proposed Action to implement the INRMP.

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Sincerely,

James A. Paslak

James Paslak

Lead Environmental Protection Specialist

E

Appendix E. Wildlife and Plant Species Lists

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Table E-1. Wildlife Species Observed on Defense Distribution Depot San Joaquin

Common Name	Scientific Name	Federal/State Status
Reptiles and Amphibians		
California toad	*Anaxyrus boreas halophilus*	
Pacific gophersnake	*Pitouphis catenifer*	
Sierran treefrog	*Pseudacris sierra*	
Northwestern fence lizard	*Sceloporus occidentalis*	
Birds		
American avocet	*Recurvirostra americana*	MBTA
American coot	*Fulica americana*	MBTA
American crow	*Corvus brachyrhynchos*	MBTA
American goldfinch	*Carduelis tristis*	MBTA
American kestrel	*Falco sparverius*	MBTA
American robin	*Turdus migratorius*	MBTA
Anna's hummingbird	*Calypte anna*	MBTA
Audubon's warbler	*Dendroica coronata auduboni*	MBTA
Barn swallow	*Hirundo rustica*	MBTA
Black phoebe	*Sayornis nigricans*	MBTA
Black-necked stilt	*Himantopus mexicanus*	MBTA
Brewer's blackbird	*Euphagus cyanocephalus*	MBTA; PIF
California gull	*Larus californicus*	MBTA
California horned lark	*Eremophila alpestris actia*	MBTA; PIF
Canada goose	*Branta canadensis*	MBTA
Cliff swallow	*Petrochelidon pyrrhonota*	MBTA
Common raven	*Corvus corax*	MBTA
Downy woodpecker	*Picoides pubescens*	MBTA
European starling	*Sturnus vulgaris*	
Golden-crowned sparrow	*Zonotrichia atricapilla*	MBTA
Great egret	*Ardea alba*	MBTA
Great-horned owl	*Bubo virginianus*	MBTA
Great-tailed grackle	*Quiscalus mexicanus*	MBTA
Green heron	*Butorides virescens*	MBTA
House finch	*Carpodacus mexicanus*	MBTA
House sparrow	*Passer domesticus*	

Common Name	Scientific Name	Federal/State Status
Killdeer	*Charadrius vociferus*	MBTA
Loggerhead shrike	*Lanius ludovicianus*	CDFW SSC, MBTA; PIF
Mallard	*Anas platyrhynchos*	MBTA
Mourning dove	*Zenaida macroura*	MBTA
Northern mockingbird	*Mimus polyglottos*	MBTA
Pacific-slope flycatcher	*Empidonax difficilis*	MBTA
Red-winged blackbird	*Agelaius phoeniceus*	MBTA
Red-tailed hawk	*Buteo jamaicensis*	MBTA
Rock pigeon	*Columbia livia*	
Song sparrow	*Melospiza melodia*	MBTA
Swainson's hawk	*Buteo swainsoni*	ST, MBTA
Western kingbird	*Tyrannus verticalis*	MBTA
Western meadowlark	*Sturnella neglecta*	MBTA
Western scrub jay	*Aphelocoma californica*	MBTA
White crowned sparrow	*Zonotrichia leucophrys*	MBTA
White-faced ibis	*Plegadis chihi*	MBTA
Yellow-throated warbler	*Setophaga dominica*	MBTA
Mammals		
Black-tailed jackrabbit	*Lepus californicus*	
Botta's pocket gopher	*Thomomys bottae*	
Coyote	*Canis latrans*	
Deer mouse	*Peromyscus maniculatus*	
Desert cottontail	*Sylvilagus audubonii*	
Feral cat	*Felis catus*	
Mexican free-tailed bat	*Tadarida brasiliensis*	
Yuma myotis	*Myotis yumanensis*	

Source: DLA 2013b, DLA 1999
ST – State Threatened
CDFW SSC – California Department of Fish and Wildlife Species of Special Concern
MBTA – Migratory Bird Treaty Act
PIF – Parterners in Flight Species of Continental Concern

Table E-2. Plant Species Observed on Defense Distribution Depot San Joaquin

Common Name	Scientific Name	Family	Native
Conifers			
Deodar cedar (ornamental)	*Cedrus deodara* (Roxb.) G. Don f.	Pinaceae	N
Atlas cedar (ornamental)	*Cedrus libani A*. Rich. [excluded]	Pinaceae	N
Italian cypress (ornamental)	*Cupressus sempervirens* L.	Cupressaceae	N
Coulter's pine (ornamental)	*Pinus coulteri* D. Don	Pinaceae	Y
Pine (ornamental)	*Pinus* L. spp.	Pinaceae	N
Redwood (ornamental)	*Sequoia sempervirens* (Lamb. ex D. Don) Endl.	Cupressaceae	Y
Monocots			
Giant reed	*Arundo donax* L.	Poaceae	N*
Slender oat	*Avena barbata* Pott ex Link	Poaceae	N*
Wild oat	*Avena fatua* L.	Poaceae	N*
Rescue grass	*Bromus catharticus* Vahl	Poaceae	N
Ripgut brome	*Bromus diandrus* Roth	Poaceae	N*
Soft brome	*Bromus hordeaceus* L.	Poaceae	N*
Compact brome	*Bromus madritensis* L.	Poaceae	N
Bermudagrass	*Cynodon dactylon* (L.) Pers.	Poaceae	N*
Yellow nutsedge	*Cyperus esculentus* L.	Cyperaceae	Y
Flatsedge	*Cyperus* L. sp.	Cyperaceae	
Saltgrass	*Distichlis spicata* (L.) Greene	Poaceae	Y
Barnyardgrass	*Echinochloa crus-galli* (L.) P. Beauv.	Poaceae	N
Barbgrass	*Hainardia cylindrica* (Willd.) Greuter	Poaceae	N
Hare barley	*Hordeum murinum* L. ssp. *leporinum* (Link) Arcang.	Poaceae	N*
Italian ryegrass	*Lolium perenne* L. ssp. *Multiflorum* (Lam.) Husnot	Poaceae	N*
Dallisgrass	*Paspalum dilatatum* Poir.	Poaceae	N
Annual bluegrass	*Poa annua* L.	Poaceae	N
Bulbous bluegrass	*Poa bulbosa* L.	Poaceae	N
Ditch rabbitsfoot grass	*Polypogon interruptus* Kunth	Poaceae	N

Common Name	Scientific Name	Family	Native
Annual rabbitsfoot grass	*Polypogon monspeliensis* (L.) Desf.	Poaceae	N*
Yellow foxtail	*Setaria pumila* (Poir.) Roem. & Schult.	Poaceae	N
Annual fescue	*Vulpia myuros* (L.) C.C. Gmel.	Poaceae	N
Washington fan palm	*Washingtonia robusta* H. Wendl.	Arecaceae	N*
Corn	*Zea mays* L. ssp. *mays*	Poaceae	N
Eudicots			
Tree of heaven	*Ailanthus altissima* (Mill.) Swingle	Simaroubaceae	N*
Alder (ornamental)	*Alnus* Mill. sp.	Betulaceae	N
Red amaranth	*Amaranthus cruentus* L.	Amaranthaceae	N
Redroot amaranth	*Amaranthus retroflexus* L.	Amaranthaceae	N
Valley redstem	*Ammannia coccinea* Rottb.	Lythraceae	Y
Common fiddleneck	*Amsinckia menziesii* (Lehm.) A. Nelson & J.F. Macbr. var. *intermedia* (Fisch. & C.A. Mey.) Ganders	Boraginaceae	Y
Scarlet pimpernel	*Anagallis arvensis* L.	Primulaceae	N
Madrone (ornamental)	*Arbutus* L. sp.	Ericaceae	N
Mexican whorled milkweed	*Asclepias fascicularis* Decne.	Asclepiadaceae	Y
Australian saltbush	*Atriplex semibaccata* R. Br.	Chenopodiaceae	N*
Coyotebrush	*Baccharis pilularis* DC.	Asteraceae	Y
Mulefat	*Baccharis salicifolia* (Ruiz & Pav.) Pers.	Asteraceae	Y
Burningbush	*Bassia scoparia* (L.) A.J. Scott	Chenopodiaceae	N
Field mustard	*Brassica rapa* L.	Brassicaceae	N*
Shepherd's purse	*Capsella bursa-pastoris* (L.) Medik.	Brassicaceae	N
Yellow starthistle	*Centaurea solstitialis* L.	Asteraceae	N*
Common tarweed	*Centromadia pungens* (Hook. & Arn.) Greene	Asteraceae	Y
Sticky chickweed	*Cerastium glomeratum* Thuill.	Caryophyllaceae	N
Sandmat	*Chamaesyce* Gray sp.	Euphorbiaceae	
Spotted sandmat	*Chamaesyce maculata* (L.) Small	Euphorbiaceae	N
Canada thistle	*Cirsium arvense* (L.) Scop.	Asteraceae	N*

Common Name	Scientific Name	Family	Native
Bull thistle	*Cirsium vulgare* (Savi) Ten.	Asteraceae	N*
Citrus	*Citrus* L. sp.	Rutaceae	N
Field bindweed	*Convolvulus arvensis* L.	Convolvulaceae	N
Asthmaweed	*Conyza bonariensis* (L.) Cronquist	Asteraceae	N
Canadian horseweed	*Conyza canadensis* (L.) Cronquist	Asteraceae	Y
Water pygmyweed	*Crassula aquatic* (L.) Schoenl.	Crassulaceae	Y
Western tansymustard	*Descurainia pinnata* (Walter) Britton	Brassicaceae	Y
Asian ponysfoot	*Dichondra micrantha* Urb	Convolvulaceae	N
Longbeak stork's bill	*Erodium botrys* (Cav.) Bertol.	Geraniaceae	N
Redstem stork's bill	*Erodium cicutarium* (L.) L'Hér. ex Aiton	Geraniaceae	N*
Musky stork's bill	*Erodium moschatum* (L.) L'Hér. ex Aiton	Geraniaceae	N
California poppy	*Eschscholzia californica* Cham.	Papaveraceae	Y
Tasmanian bluegum (ornamental)	*Eucalyptus globulus* Labill.	Myrtaceae	N*
Gum (ornamental)	*Eucalyptus* L'Hér. ssp.	Myrtaceae	N
Ash (ornamental)	*Fraxinus* L. sp.	Oleaceae	N
Western marsh cudweed	*Gnaphalium palustre* Nutt.	Asteraceae	Y
Hairy gumweed	*Grindelia hirsutula* Hook. & Arn.	Asteraceae	Y
Common sunflower	*Helianthus annuus* L.	Asteraceae	Y
Salt heliotrope	*Heliotropium curassavicum* L.	Boraginaceae	Y
Telegraphweed	*Heterotheca grandiflora* Nutt.	Asteraceae	Y
Shortpod mustard	*Hirschfeldia incana* (L.) Lagr.-Foss.	Brassicaceae	N*
Smooth cat's ear	*Hypochaeris glabra* L.	Asteraceae	N
Walnut	*Juglans* L. sp.	Juglandaceae	
Prickly lettuce	*Lactuca serriola* L.	Asteraceae	N
Crepemyrtle (ornamental)	*Lagerstroemia* L. (*indica x fauriei*)	Lythraceae	N
Least duckweed	*Lemna minuta* Kunth	Lemnaceae	Y
Broadleaved pepperweed	*Lepidium latifolium* L.	Brassicaceae	N*
Shining pepperweed	*Lepidium nitidum* Nutt.	Brassicaceae	Y

Common Name	Scientific Name	Family	Native
Bird's-foot trefoil	*Lotus corniculatus* L.	Fabaceae	N
Hollowleaf annual lupine	*Lupinus succulentus* Douglas ex K. Koch	Fabaceae	Y
Blue potatobush (ornamental)	*Lycianthes rantonnetii* (Carrière) Bitter	Solanaceae	N
Apple (ornamental)	*Malus* Mill. sp.	Rosaceae	N
Cheeseweed mallow	*Malva parviflora* L.	Malvaceae	N
Disc mayweed (pineappleweed)	*Matricaria discoidea* DC.	Asteraceae	N
Burclover	*Medicago polymorpha* L.	Fabaceae	N*
Oleander (ornamental)	*Nerium oleander* L.	Apocynaceae	N
Olive (ornamental)	*Olea europaea* L.	Oleaceae	N*
Creeping woodsorrel	*Oxalis corniculata* L.	Oxalidaceae	N
Fraser's photinia (ornamental)	*Photinia ×fraseri* Dress	Rosaceae	N
Bristly oxtongue	*Picris echioides* L.	Asteraceae	N*
Narrowleaf plantain	*Plantago lanceolata* L.	Plantaginaceae	N*
Common plantain	*Plantago major* L.	Plantaginaceae	N
California sycamore (ornamental)	*Platanus racemosa* Nutt.	Plantaginaceae	Y
Curlytop knotweed	*Polygonum lapathifolium* L.	Polygonaceae	Y
White poplar (ornamental)	*Populus alba* L.	Salicaceae	N
Fremont cottonwood	*Populus fremontii* S. Watson ssp. *fremontii*	Salicaceae	Y
Little hogweed	*Portulaca oleracea* L.	Portulacaceae	N
Cherry plum (ornamental)	*Prunus cerasifera* Ehrh.	Rosaceae	N*
Jersey cudweed	*Pseudognaphalium luteoalbum* (L.) Hilliard & B.L. Burtt	Asteraceae	N
Oak (ornamental)	*Quercus* L. spp.	Fagaceae	
Hawthorn	*Rhaphiolepis* Lindl., nom. cons. sp.	Rosaceae	N
Black locust (ornamental)	*Robinia pseudoacacia* L.	Fabaceae	N*
Rose (ornamental)	*Rosa* L. sp.	Rosaceae	N
Curly dock	*Rumex crispus* L.	Polygonaceae	N*
Narrowleaf willow	*Salix exigua* Nutt.	Salicaceae	Y

Common Name	Scientific Name	Family	Native
Weeping willow (ornamental)	*Salix* L. sp. (*Salix* ×*sepulcralis* Simonkai [*alba* × ?*pendulina*])	Salicaceae	N
Pacific willow	*Salix lucida* Muhl. ssp. *lasiandra (*Benth.) A.E. Murray	Salicaceae	Y
Prickly Russian thistle	*Salsola tragus* L.	Chenopodiaceae	N*
Peruvian peppertree (ornamental)	*Schinus molle* L.	Anacardiaceae	N*
Old-man-in-the-Spring	*Senecio vulgaris* L.	Asteraceae	N
Blessed milkthistle	*Silybum marianum* (L.) Gaertn.	Asteraceae	N*
Tall tumblemustard	*Sisymbrium altissimum* L.	Brassicaceae	N
London rocket	*Sisymbrium irio* L.	Brassicaceae	N*
Hedgemustard	*Sisymbrium officinale* (L.) Scop.	Brassicaceae	N
Carolina horsenettle	*Solanum carolinense* L.	Solanaceae	N
Greenspot nightshade	*Solanum douglasii* Dunal	Solanaceae	Y
Spiny sowthistle	*Sonchus asper* (L.) Hill	Asteraceae	N
Common chickweed	*Stellaria media* (L.) Vill.	Caryophyllaceae	N
Rod wirelettuce	*Stephanomeria virgata* Benth.	Asteraceae	Y
Common dandelion	*Taraxacum officinale* F.H. Wigg.	Asteraceae	N
Puncturevine	*Tribulus terrestris* L.	Zygophyllaceae	N
Strawberry clover	*Trifolium fragiferum* L.	Fabaceae	N
Broadleaf cattail	*Typha latifolia* L.	Typhaceae	Y
Stinging nettle	*Urtica dioica* L.	Urticaceae	Y
Water speedwell	*Veronica anagallis-aquatica* L.	Scrophulariaceae	N
Rough cocklebur	*Xanthium strumarium* L.	Asteraceae	Y

Source: DLA 2013b, DLA 1999
** Cal-IPC recognized noxious weeds*

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F

Appendix F. Environmental Assessment

FINDING OF NO SIGNIFICANT IMPACT
FOR IMPLEMENTING AN
INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN
DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN, CALIFORNIA

Pursuant to the Council on Environmental Quality Regulations (40 Code of Federal Regulations Parts 1500–1508) for implementing the procedural provisions of the National Environmental Policy Act (NEPA) (42 United States Code § 4321 et seq.), the Defense Logistics Agency (DLA) has conducted an Environmental Assessment (EA) of the potential effects associated with implementing an Integrated Natural Resources Management Plan (INRMP) at the Defense Distribution Depot San Joaquin, California. The INRMP has been prepared in accordance with the provisions of the Sikes Act as amended (16 United States Code § 670a et seq.); DLA Instruction 4108, *Natural and Cultural Resources Conservation Program*; and Army Regulation 200-1, *Environmental Protection and Enhancement*. The INRMP and EA are herewith incorporated by reference into this Finding of No Significant Impact.

Proposed Action. DLA proposes to implement this INRMP, which supports the management of natural resources as described by the INRMP itself. The purpose of the Proposed Action is to carry out the set of resource-specific management measures developed in the INRMP, which would enable Defense Distribution Depot San Joaquin to manage the use and condition of natural resources on the aforementioned sites primarily to protect the natural setting for mission purposes. Implementation of the Proposed Action would support DLA's continuing need to ensure the safety and efficiency of the mission while practicing sound resources stewardship and complying with environmental policies and regulations.

The Proposed Action supports an ecosystem approach and includes natural resources management measures to be undertaken on Defense Distribution Depot San Joaquin, California. The Proposed Action focuses on a 5-year planning period, which is consistent with the timeframe for the management measures described in the INRMP. This planning period will become effective upon the date of the last signatory and shall continue in full force for a period of 5 years. Additional environmental analyses might be required as new management measures are developed over the long term (i.e., beyond 5 years). The INRMP will be revised and updated at the end of the 5-year planning period.

Alternatives. The development of proposed management measures for the INRMP included a screening analysis of resource-specific alternatives. The screening analysis involved the use of accepted criteria, standards, and guidelines, when available; and best professional judgment to identify management practices for achieving natural resources management objectives on the installation. The outcome of the screening analysis led to the development of the Proposed Action as described above. Consistent with the intent of the National Environmental Policy Act, this screening process focused on identifying a range of reasonable resource-specific management alternatives and developing a plan that could be implemented, as a whole, in the foreseeable future. Management alternatives deemed to be infeasible were not analyzed further. As a result of the screening process, the EA, made an integral part of the INRMP, formally addresses two alternatives: the Proposed Action (i.e., implementation of the INRMP) and the No Action Alternative.

No Action Alternative. Under the No Action Alternative, the proposed management measures set forth in the INRMP would not be implemented. Current management measures for natural resources would remain in effect and existing (i.e., baseline) conditions would continue. The No Action Alternative serves as a benchmark against which the Proposed Action can be evaluated. Inclusion of a No Action Alternative is prescribed by Council on Environmental Quality regulations; therefore, the No Action Alternative has been analyzed in the EA, which is included as a component of this INRMP.

Factors Considered in Determining that No Environmental Impact Statement is Required. The EA examines potential effects of the Proposed Action and the No Action Alternative on resources and areas of environmental concern that could be affected by implementing the INRMP. These include environmental setting; climate; air quality; noise; topography; geology; soils; water resources; wetlands; aquatic habitat; riparian habitat; terrestrial ecosystems; fauna; endangered, threatened, and rare species; land use; facilities; hazardous and toxic materials; socioeconomic resources; and environmental justice. Implementation of the Proposed Action would result in short- and long-term beneficial effects on identified resources and areas of environmental concern.

Findings. Based on the results of the EA, it is determined that implementation of the Proposed Action would have no significant direct, indirect, or cumulative impacts on the quality of the natural or human environment. Implementation of the INRMP would be expected to improve existing conditions at Defense Distribution Depot San Joaquin as shown by the potential for beneficial effects. The Proposed Action would enable DLA, over time, to achieve its goal of maintaining ecosystem viability and ensuring sustainability of the mission. Because there would be no significant environmental impacts resulting from implementation of the Proposed Action, an Environmental Impact Statement is not required and will not be prepared.

Jonathan Mathews Date

DLA Installation Operations Site Director

Environmental Assessment

Defense Distribution Depot

San Joaquin, California

Final

May 2018

Environmental Assessment

Defense Distribution Depot San Joaquin

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Contract No. W91278-15-D-0018
Task Order 0002

May 2018

ENVIRONMENTAL ASSESSMENT ADDRESSING IMPLEMENTATION OF THE INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN AT DEFENSE DISTRIBUTION DEPOT, SAN JOAQUIN, CALIFORNIA

Responsible Agency: Defense Logistics Agency (DLA)

Affected Location: Defense Distribution Depot San Joaquin (Depot)

Report Designation: Environmental Assessment

Abstract: DLA proposes to implement the Integrated Natural Resources Management Plan (INRMP) for the Depot. The INRMP was prepared to assist the Installation Support Staff Director with the conservation and rehabilitation of natural resources consistent with the military mission of the Depot for the next 5 years after the approval (Fiscal Years 2018–2022). The INRMP is based on an integrated approach to ecosystem management and addresses wildlife and vegetation goals and objectives, as well as the water and soil resources in the context of the military mission of the Depot.

Implementing the INRMP would result in a comprehensive natural resources management strategy for the Depot that represents compliance, restoration, prevention, and conservation; initiates a cohesive management approach for natural resources on the Depot; and meets legal and policy requirements consistent with national natural resources management philosophies.

Under the No Action Alternative, DLA would not implement the INRMP. In general, implementation of the No Action Alternative would require that DLA continue to not implement specific measures to protect and enhance the natural resources on the Depot which could impede the ability of the installation to meet its current and future mission requirements. The No Action Alternative would not meet the purpose of and need for the Proposed Action.

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List of Acronyms

CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DLA	Defense Logistics Agency
DLAR	DLA Environmental Protection Regulation
EA	Environmental Assessment
EIS	Environmental Impact Statement
FONSI	Finding of No Significant Impact
INRMP	Integrated Natural Resources Management Plan
NEPA	National Environmental Policy Act
NOA	Notice of Availability
SSC	state species of concern
USC	United States Code

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8 Purpose of and Need for the Proposed Action

8.1 Introduction

The Defense Logistics Agency (DLA) is proposing to implement an Integrated Natural Resources Management Plan (INRMP) for Defense Distribution Depot San Joaquin (the Depot). The INRMP was prepared to assist the Installation Operations Site Director with the conservation and rehabilitation of natural resources consistent with the military mission of the Depot for the next 5 years after the approval (Fiscal Years [FY] 2018–2022). The INRMP is consistent with the Sikes Act Improvement Act of 1997, as amended through 2010 (16 United States Code [USC] 670a et seq.), which requires the preparation, implementation, update, and review of an INRMP for each military installation in the United States and its territories with significant natural resources. Defense Logistics Agency Instruction 4108, *Natural and Cultural Resources Conservation Program* defines the INRMP as a required tool used to implement the natural resources management program (DLA 2009).

This Environmental Assessment (EA) will evaluate the potential environmental impacts associated with implementing the INRMP and the No Action Alternative and has been prepared in accordance with the Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) (Title 40 Code of Federal Regulations (CFR) §§ 1500–1508); Defense Logistics Agency Regulation (DLAR) 1000.22, *Environmental Considerations in Defense Logistics Agency Actions*; and other applicable DLA issuances (e.g., regulations, directives, memorandums, instructions). Because many of the required components are provided in the INRMP, they are incorporated into this EA by reference in accordance with CEQs guidance, *Improving the Process for Preparing Efficient and Timely Environmental Reviews Under the National Environmental Policy Act.*

8.2 Background

Defense Distribution Depot, San Joaquin is a DLA installation in Tracy, California, approximately 20 miles south of Stockton. It consists of approximately 908 acres and is comprised of 448 acres of developed area which is directly south of the Depot Annex which comprises 460 acres of agricultural land. The primary mission of the Depot is storage, shipping, packaging, and maintenance of general supplies in support of the United States Armed Forces defense mission (DLA 2013a).

A description of the location, facilities, history, and mission of the Depot can be found in Section 2 of the INRMP.

8.3 Purpose of and Need for the Proposed Action

The Proposed Action consists of the implementation of the natural resources management measures outlined in the *Defense Distribution Depot San Joaquin INRMP* dated May 2018 (DLA 2018). Implementation of the Proposed Action would support the Depot's need to fulfill mission requirements while practicing sound natural resources stewardship on the installation and complying with environmental policies and regulations.

The purpose of the Proposed Action is to direct and support the installation with the conservation and rehabilitation of natural resources consistent with the military mission of the Depot during FY 2018-2022. The INRMP is based on an integrated approach to ecosystem management and addresses wildlife and vegetation goals and objectives, as well as the water and soil resources in the context of the military mission of the Depot.

The need for the Proposed Action is to implement the natural resources management actions identified in the INRMP. Implementation of the INRMP is needed for compliance with environmental laws and regulations; implementation of guidelines and policies for natural resources management; application of best available information and adaptive management; and sustainability of the military mission.

8.4 Scope of Analysis

The scope of the EA includes an evaluation of the Proposed Action and the No Action Alternative. Under the No Action Alternative, projects in the INRMP would not be implemented. In accordance with CEQ regulations implementing NEPA (40 CFR § 1502.14), the No Action Alternative has been analyzed to provide a baseline against which the environmental impacts of implementing the range of alternatives addressed can be compared. This EA examines the potential effects of the Proposed Action and No Action Alternative on six resource areas: land use; air quality and climate; geology, topography, and soils; water resources; wildlife and endangered threatened and rare species. These were identified as being potentially affected by the Proposed Action.

8.5 Summary of Key Environmental Compliance Requirements

8.5.1 National Environmental Policy Act of 1969

The NEPA, 42 United States Code (USC) 4321 et seq., was signed into law on January 1, 1970. The Act establishes a national environmental policy and goals for the protection, maintenance, and enhancement of the environment and provides a process for implementing these goals within the federal agencies. The Act also establishes the CEQ to coordinate federal environmental efforts. The process for implementing NEPA is outlined in 40 CFR §§ 1500–1508. The CEQ regulations specify that an EA serves to provide evidence and analysis for determining whether to prepare a Finding of No Significant Impact (FONSI) or an Environmental Impact Statement (EIS). As part of the EA process, DLA will determine whether the Proposed Action would have the potential to result in significant impacts. If such impacts are predicted, then DLA would decide whether to mitigate impacts below the level of significance, undertake the preparation of an EIS, or select the No Action Alternative. DLA's implementing regulation for NEPA is DLAR 1000.22 (DLA 2011).

According to CEQ regulations, the requirements of NEPA must be integrated "with other planning and environmental review procedures required by law or by agency so that all such procedures run concurrently rather than consecutively." The adoption of an INRMP can be considered a major federal action as defined by Section 1508.18 of the CEQ regulations. As such, the CEQ Regulations (40 CFR §§ 1500–1508) for implementing the procedural provisions of NEPA (42 USC § 4321 et seq.) require the preparation of an EA or EIS for the implementation of an INRMP, whichever is

appropriate. For the purposes of implementing the *Defense Distribution Depot San Joaquin INRMP*, an EA has been chosen as the appropriate level of NEPA analysis.

8.5.2 Applicable Environmental and Regulatory Compliance

The NEPA process does not replace procedural or substantive requirements of other environmental statutes and regulations. It addresses them collectively in the form of an EA or EIS, which enables the decision maker to have a comprehensive view of major environmental issues and requirements associated with the Proposed Action.

The Depot is required by federal law (e.g., Sikes Act, Endangered Species Act, and Clean Water Act) and Department of Defense and DLA regulations and instructions to conserve and enhance native ecosystems and environments, including sensitive species, and to maximize public outdoor recreational opportunities within constraints of the military mission. The Sikes Act mandates not only the preparation of an INRMP but also the implementation of the management activities contained in the plan. According to the Sikes Act, the conservation program must be consistent with the mission-essential use of the installation and its lands and cause no net loss of military land use. The Depot INRMP has been prepared to meet natural resources regulatory requirements while ensuring no net loss in the capability of military lands to support the military mission of the Depot.

8.6 Agency Coordination and Public Involvement

DLAR 1000.22 requires DLA to facilitate coordination with federal, state, and local officials and organizations that could be affected by a proposed action (e.g., U.S. Fish and Wildlife Service and California Department of Fish and Wildlife [CDFW]). DLA invites all agencies and the public with an interest in the Proposed Action and alternatives to participate in this NEPA process, which will provide DLA with the opportunity to coordinate with and consider the views of other agencies and individuals. A premise of NEPA is that the quality of federal decisions will be enhanced if proponents provide information to the public and involve the public in the planning process.

Section 1.4 of the INRMP describes the required coordination process for the preparation of the INRMP. A Notice of Availability (NOA) announcing the availability of the Revised Draft INRMP and Draft EA was published in a local newspaper on 6 April 2018 to initiate a 30-day public review period. The NOA solicited comments on the Draft EA and involved the public in the decision-making process. The Revised Draft INRMP and Draft EA were made available at the Stockton-San Joaquin County Public Library of Tracy. A NOA for the Final INRMP and Final EA will also be published in the Tracy Press and Vida en el Valle (local newspapers) upon signature of the FONSI.

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9 Description of the Proposed Action and Alternatives

9.1 Proposed Action

The Depot proposes to implement an INRMP, which supports the management of natural resources as described by the plan itself. The Proposed Action supports an ecosystem approach and includes natural resources management measures to be undertaken at the Depot. The Proposed Action focuses on a 5-year planning period, which is consistent with the timeframe for the management measures described in the INRMP. This planning period would begin in FY 2018 and end in FY 2022. Additional environmental analysis could be required as new management measures are developed over the long-term (i.e., beyond 5 years). The natural resources management measures provided in the INRMP must be consistent with the following criteria, in order to meet the goals and objectives:

- Be based on the principles of ecosystem management.
- Provide for sustainable multipurpose use of natural resources.
- Maintain compliance with relevant environmental regulations.
- Provide for public access for use of natural resources subject to safety and military security considerations.
- Establish specific natural resources management objectives and timeframes for the Proposed Action.
- Prevent loss in the capability of military lands to support the military mission of the installation.

Management objectives established in the INRMP were developed through a thorough evaluation of the natural resources present at the Depot. This section presents the preferred management alternatives based on the professional opinions of the Depot, U.S. Fish and Wildlife Service, and CDFW. Through these evaluations, a set of natural resources planning and management goals have been established that represent the most current theories on adaptive ecosystem-based planning as summarized in Table 1. Selection of these management goals has been tempered with the fact that the operational mission at the Depot takes primacy over natural resources management.

Table 9. Summary of Depot INRMP Goals

Ecosystem Management Goals
• Manage The Depot based on a regional ecosystem approach that conserves biodiversity. • Identify natural resources and operational actions that compromise the function and composition of ecosystems and develop remedies through adaptive management. • Implement management strategies with consideration of ecological units and timeframes. • Support sustainable, multiple-use human activities. • Apply ecosystem-based management through implementation of the INRMP and other installation plans and programs.

Table 9. Summary of Depot INRMP Goals

Threatened, Endangered, and Species of Concern Goals
• Manage The Depot on a regional ecosystem-based approach that manages sensitive species and their associated ecosystems while protecting the operational functionality of the military missions. • Ensure that The Depot remains in compliance with the ESA and appropriate state regulations. • Promote natural resources and ecosystem management in the local region that benefits the functionality of the ecosystems. • Protect sensitive wildlife habitats on The Depot.
Wetlands and Waters of the United States Goals
• Remain in compliance with U.S. Army Corps of Engineers and State of California wetlands regulations. • Minimize the operational impact of The Depot missions on wetland vegetation in the retention pond.
Watershed Management Goals
• Reduce/control nutrient and sediment inputs into the watershed that degrade water quality. • Minimize nonpoint source pollution of surface water in the watershed through the implementation of best management practices. • Maintain vegetation buffers on waterways/riparian corridors.
Fish and Wildlife Management Goals
• Manage based on an ecosystem management approach, rather than a single-species paradigm. • Employ a systematic approach to managing wildlife resources, using a process that includes inventory, monitoring, modeling, management, assessment, and evaluation. • Minimize wildlife-related health risks, safety risks, and environmental damage. • Maintain diversity of wildlife in areas on the installation where there will be no conflict with the mission. • Maintain and involve partnerships with agencies and groups involved in wildlife management.
Habitat Management Goals
• Enhance habitat by providing suitable food and cover for native species while protecting the operational functionality of The Depot's missions. • Protect native habitat diversity. • Enhance habitat for native species by removing invasive vegetation.
Exotic and Invasive Species Management Goals
• Ensure compliance with environmental legislation, regulations, and guidelines. • Control pests and invasive species.
Grounds Maintenance Goals
• Lessen or avoid adverse effects from project activities on the overall ecosystem and its sensitive resources. • Make maximum use of regional, native plant species and avoid introduction of invasive, exotic species in revegetation and landscaping activities. • Reduce maintenance inputs in terms of energy, water, manpower, and equipment.
Agricultural Outleasing Goals
• Balance production on agricultural lands with long-term health and functionality of the soils. • Ensure outlease terms provide ecological benefits where possible and support installation natural resources program management.
Outdoor Recreation Goals
• Provide outdoor recreation experiences while sustaining ecosystem integrity. • Ensure that outdoor recreation activities are not in conflict with mission priorities.
Environmental Awareness, Education, and Outreach Goals
• Provide education opportunities to military personnel. • Promote environmental stewardship through training and awareness.

Table 9. Summary of Depot INRMP Goals

Surrounding Lands Goals
• Coordinate with surrounding landowners on ecosystem-based management of resources and encourage cooperative efforts on adjacent lands that are complementary to the INRMP. • Minimize threats to The Depot assets and natural resources from off-site land use.

For each of the goals and resources areas listed above, specific concerns, objectives, and actions were developed to meet the overriding goals for natural resources managed on the Depot (see INRMP Section 5.1). A summary of the management actions is presented in Appendix C of the INRMP. Appendix C contains the projects proposed for the Depot and includes the relevant INRMP subject areas, a specific INRMP issue number, a project description, the corresponding law or regulation, Department of Defense Class, proposed fiscal year for implementing each recommendation, and estimated costs for completion.

The projects presented in Appendix C of the INRMP strive to enhance natural resources on the Depot, without impacting other installation plans and activities. Any future changes in mission, activity, or technology should be analyzed to assess their impact on natural resources. As new installation plans and DLA guidance and regulations are developed, they should be integrated with the drivers and management actions resulting from this INRMP.

9.2 Alternatives Considered but Eliminated from Detailed Analysis

Under NEPA, reasonable alternatives must be considered in the EA. Considering alternatives helps to avoid unnecessary impacts and allows an analysis of reasonable ways to achieve the proposed action and satisfy the stated purpose and need. A reasonable alternative must be capable of implementation and meet the selection standard.

Implementation of the final approved INRMP is required per the statutory provisions of the Sikes Act (16 USC 670 et seq.) and DLAR 1000.22, *Environmental Considerations in Defense Logistics Agency Actions*. The development of proposed management measures for the INRMP included screening analysis of resource-specific alternatives relative to the criteria provided in Section 2.1. As a result of this screening process, this EA addresses two alternatives: the Proposed Action (i.e., implementation of the INRMP) and the No Action Alternative.

9.3 No Action Alternative

Under the No Action Alternative, the proposed management measures set forth in the INRMP would not be implemented. Current management measures for natural resources would remain in effect and existing conditions would continue. This document refers to the continuation of existing (i.e., baseline) conditions of the affected environment, without implementation of the Proposed Action, as the No Action Alternative because this is the initial INRMP for the Depot. The No Action Alternative serves as a benchmark against which federal actions can be evaluated. Inclusion of a No Action Alternative is prescribed by CEQ regulations and, therefore, will be carried forward for further analysis.

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10 Affected Environment and Environmental Consequences

This section addresses the environmental resources and conditions most likely to be affected by the Proposed Action and No Action Alternative. It provides information to serve as a baseline from which to identify and evaluate environmental consequences likely to result from implementation of the Proposed Action and alternatives. The affected environment within the Depot and the surrounding area is described in detail in the INRMP, which is available for review. Therefore, that information, which can be used as a baseline for identifying potential impacts of the alternatives, is only mentioned briefly for each affected resource in this EA and is incorporated by reference. For more in-depth information for each resource listed in this section, see Section 4 of the INRMP.

All potentially relevant environmental resource areas were initially considered for analysis in this EA. Upon initial investigation, the following resource areas would not be impacted or would have insignificant impacts and will not be analyzed further:

- ***Cultural Resources.*** The Proposed Action would have no effect on archaeological or architectural resources. Surveys at the Depot were conducted in 2005, 2011, and 2012. The surveys found no National Register of Historic Places-listed or eligible archaeological or architectural resources at the installation (DLA 2012a).
- ***Hazardous Materials and Waste.*** The Proposed Action would have no effect on hazardous materials and waste. The Depot's Hazardous Waste Management Plan establishes policies and procedures for complying with Title 22, Social Security, Division 4.5 of the California Code of Regulations as promulgated by the California Department of Toxic Substances Control. The implementation of the INRMP would not affect the Hazardous Waste Management Plan nor significantly add to the hazardous materials or waste produced or stored at the Depot.
- ***Environmental Restoration Program.*** The Proposed Action would have no effect on the environmental restoration program. The installation would still be required to identify, investigate, and clean up contaminated sites. The Proposed Action would not add or disturb any existing contaminated areas. The status of the active monitoring and remediation work at the Depot can be found in the Environmental Baseline Survey Report 2012 (DLA 2012b).
- ***Socioeconomics and Environmental Justice.*** The Proposed Action would have no effect on socioeconomics. There would be no change in the number of personnel as result of the implementation of this INRMP; therefore, there would be no changes in area population or associated changes in demand for housing and services. Accordingly, the Depot has omitted detailed examination of socioeconomics as a resource area. Implementation of the INRMP would not render vulnerable any of the groups targeted for protection under Executive Order 12898, which requires federal actions to address environmental justice in minority populations and low-income populations. No groups of people, including racial, ethnic, or socioeconomic groups, would bear a disproportionate share of any resulting potential negative environmental consequences.

- ***Health and Safety.*** The Proposed Action would have no effect on health and safety at the Depot. Every contractor and employee at the installation is responsible for compliance with rules set forth by the Federal Occupation Safety and Health Administration. Implementation of the INRMP would not affect health and safety standards at the Depot.
- ***Noise.*** The Proposed Action would have no effect on noise levels at the Depot. The ambient noise environment at the Depot is primarily affected by rail traffic on adjacent railroads and local vehicle traffic (DLA 2013a). Specific on-installation sources of noise include vehicular traffic, including personal vehicles, semi-trailers, forklifts, and other cargo-moving machines at the Depot, and occasional agriculture equipment at the Annex.
- ***Transportation and Infrastructure.*** The Proposed Action would have no effect on the transportation and infrastructure of the Depot. Systems included in transportation and infrastructures include: transportation, electrical, natural gas, liquid fuel, potable water, sanitary sewer and wastewater, communications, and solid waste management. Activities associated with implementation of the INRMP would not cause a significant change in the transportation and infrastructure of the Depot.
- ***Air Quality and Climate Change.*** The Proposed Action would have no effect on air quality. The primary concern regarding the potential environmental effects on air quality include exceedances of National Ambient Air Quality Standards and other federal, state, and local limits; and impacts on existing air permits. Potential effects on existing pollutant emissions are precluded by the fact that natural resources management actions would not involve activities that would contribute to changes in existing air quality. Therefore, there would be no effects regarding air quality as a result of implementation of the INRMP and no effects on climate change as a result of implementation of the INRMP.

10.1 Land Use

10.1.1 Existing Conditions

The installation consists of 908 total acres. Land use categories include Industrial, Administrative, and Installation Maintenance and Support at the Depot and Agricultural on the Depot Annex. Industrial land use consists of warehousing, transportation, and light industrial activities and encompasses most of the Depot. Administrative land use (e.g., general purpose offices, professional services, community services, and technical support facilities) is located primarily at the northwestern corner, and at several small areas interspersed throughout the Industrial land uses in the remainder of the Depot. The Installation Maintenance and Support land use (e.g., facilities such as maintenance, fire, safety, and utility operations) is at the northwestern corner adjacent to the east of the Administrative land uses. The Depot is substantially built out with open spaces used for trailer storage, parking, and utility laydown yards (DLA 2015).

The Annex is used for agriculture (e.g., agricultural row crops and orchard operations) and, with the exception of an environmental remediation system, does not have any development (DLA 2015).

Areas outside of and adjacent to the Depot include those within the City of Tracy and the unincorporated area of San Joaquin County, while the Annex is surrounded by unincorporated areas of the county. Railroad tracks divide the Depot from the Annex and form the southeastern boundary of the Depot. Residential land uses, including Residential Low (i.e., low density at 2.1 to 5.8

residential units per gross acre) in the City of Tracy and Rural Residential in unincorporated San Joaquin County, are adjacent to the west and southwest, respectively, of the Depot. The remaining properties adjacent to the Depot and Annex are in unincorporated areas of San Joaquin County and are designated primarily as agricultural (General Agriculture and Agricultural-Urban Reserve land use), except for a small area of Limited Industrial land use immediately east of the Depot at the crossroads of railroads (DLA 2015).

Recreational land uses are limited to a fitness center, an informal walking/bicycle path and a ball field located at the northwestern corner of the Depot. Sidewalks exist in some areas; however, their primary function is to provide access to facilities rather than for recreational purposes. The Annex has no designated recreational facilities.

For more information regarding land use at the Depot, refer to Section 4.1 of the INRMP.

10.1.2 Environmental Consequences

Proposed Action. Beneficial impacts on land use would be expected. Under the Proposed Action, greater guidance on the overall land use management objective would be afforded. Land uses would not specifically be expected to change at the Depot, but instead land use patterns would be enhanced through planning for more suitable habitat for native species.

No Action Alternative. No effects would be expected. No changes to land use associated with natural resources management would be expected under the No Action Alternative.

10.2 Geology

10.2.1 Existing Conditions

The installation is near the west-central border of the San Joaquin Valley, which constitutes the southern region of the Great Valley Geomorphic Province. The San Joaquin Valley is a topographic and structural basin with the axis offset to the west and gently sloping to the north. It is bounded by the Sierra Nevada Range to the east, the Coast Ranges to the west, and the Sacramento River-San Joaquin River Delta to the north (DLA 2014). For more information regarding geology at the Depot, refer to Section 4.4 of the INRMP.

10.2.2 Environmental Consequences

Proposed Action. Beneficial effects would be expected. By implementing an effective soil erosion and sedimentation program, impacts on geologic resources associated with erosion and sedimentation on the Depot would be minimized. Indirect beneficial effects would result from native plant seeding and revegetation.

No Action Alternative. Minor adverse effects would be expected. By failing to implement an effective soil erosion and sedimentation program, impacts on geologic resources associated with erosion and sedimentation at the Depot would be expected to continue.

10.3 Topography

10.3.1 Existing Conditions

The Depot is located in the lower San Joaquin Valley which includes floodplains, alluvial fans, fan terraces, basins, dunes, low terraces, and high terraces. San Joaquin Valley slopes are generally level, although some areas are undulating to hilly because of dissection and erosion (USDA 1992). On the Depot specifically, the area is characterized by mostly flat uplands which are sloping gently downward to the northeast towards the broad delta formed by the San Joaquin and Sacramento Rivers. The elevation ranges from 110 feet above sea level at the south corner to 45 feet at the northern boundary of the Annex (URS 2010). For more information regarding topography at the Depot, refer to Section 4.4.2 of the INRMP.

10.3.2 Environmental Consequences

Proposed Action. Beneficial effects would be expected. By implementing an effective soil erosion and sedimentation program, impacts on topography associated with erosion and sedimentation at the Depot would be minimized. Indirect beneficial effects would result from native plant seeding and revegetation.

No Action Alternative. Minor adverse effects would be expected. By failing to implement an effective soil erosion and sedimentation program, impacts on topography associated with erosion and sedimentation at the Depot would be expected to continue.

10.4 Soils

10.4.1 Existing Conditions

The predominant naturally occurring soils underlying the Depot are the Capay-Urban land complex while the Annex is mainly characterized by Capay clay, with localized areas of the El Solyo clay loam and Stomar clay loam. The Capay-Urban land complex associated with the Depot is almost entirely developed, but those areas still exposed at the surface are similar to those of Capay clay (USDA 1992). For more information regarding soils at the Depot, refer to Section 4.4.3 of the INRMP.

10.4.2 Environmental Consequences

Proposed Action. Beneficial effects would be expected. By implementing an effective soil erosion and sedimentation program, impacts on soils associated with erosion and sedimentation would be minimized. Monitoring of soil conditions to identify potential problem areas, the implementation of conservation measures in areas where exposure of soils is necessary, and, when possible, the avoidance of activities likely to result in erosion would minimize potential impacts on the soil resources and result in a reduction in erosion. Some projects would result in soil disturbance, which can be mitigated through seeding and revegetation.

No Action Alternative. Minor adverse effects would be expected. By failing to implement an effective soil erosion and sedimentation program, impacts on soils associated with erosion and sedimentation at the Depot would be expected to continue. The No Action Alternative does not

include the implementation of soil conservation measures, or a plan of action to prevent or minimize potential soil problems related to erosion and sedimentation before their occurrence. Implementation of the No Action Alternative would involve reactive management to problems after their occurrence, rather than managing the resources to prevent impacts.

10.5 Water Resources

10.5.1 Existing Conditions

Water resources are defined in this discussion as surface water, wetlands, and riparian. The Depot is located in the major hydrologic unit area of San Joaquin and in the San Joaquin watershed (HUC8). The major hydrologic features surrounding the Depot include the Sacramento and San Joaquin Rivers and their tributaries. A stretch of the American River below Folsom Lake has been designated as a National Wild and Scenic River. Two major canals are in the region: the state-owned California Aqueduct and the federal Delta-Mendota Canal. Both canals move water from California Delta to Buena Vista Lake near Bakersfield (USDA 2006).

There are no naturally occurring surface water resources on the Depot. There are no wetlands regulated under Section 404 of the Clean Water Act on the Depot. The principal drainages near the Depot are the Tom Payne Slough north of the Depot, Corral Hollow Creek to its south, and the San Joaquin River, into which both the Slough and the Creek flow, several miles east of the Depot. Surface water runoff from within the Depot is collected in drains that lead to the unlined stormwater detention pond located in the northwest corner of the Depot. Water evaporates or infiltrates into the ground beneath the unlined detention pond and migrates toward the water table. If the stormwater discharge pond levels exceed its capacity, the stormwater is pumped and discharged to an offsite canal (DLA 2012a). On the Annex, unlined ditches convey stormwater runoff to local percolation areas between farm fields (DLA 2012c).

For more information regarding water resources at the Depot, refer to Section 4.5 and 4.6 of the INRMP.

10.5.2 Environmental Consequences

Proposed Action. Beneficial effects would be expected. The establishment of riparian buffers would result in beneficial effects on water quality by reducing nonpoint source impacts associated with runoff and adjacent land uses. Implementation of the Proposed Action would protect ponds that support wetland vegetation. Additional efforts would be made to reduce impacts on wetland vegetation by planning activities, when possible, in a manner consistent with wetlands protection objectives. Indirect beneficial effects would result from soil and erosion management.

No Action Alternative. Minor adverse effects would be expected. The No Action Alternative does not provide a formal plan of action for monitoring and protecting the water resources at the Depot. Water resources are vulnerable to degradation without the implementation of a formal plan of action that includes watershed protection measures and nonpoint source pollution controls. Also, the No Action Alternative does not establish limited-use wetland buffers to protect water quality by reducing nonpoint source impacts associated with runoff and adjacent land uses, nor does it establish a formal set of management measures to protect and enhance wetlands by preventing or minimizing potential impacts resulting from mission-related activities.

10.6 Floodplains

10.6.1 Existing Conditions

The Depot does not fall within a federally regulated floodplain. Per the California Department of Water Resources Awareness Floodplain Maps, the Depot is not within an Awareness Floodplain (100-year flood hazard area). The closest designated Awareness Floodplain is 1 mile south of the Depot. The intent of the Awareness Floodplain Mapping project is to identify all pertinent flood hazard areas for areas not mapped under the Federal Emergency Management Agency National Flood Insurance Program and to provide the community and residents an additional tool in understanding potential flood hazards in areas not currently mapped as a regulated floodplain.

10.6.2 Environmental Consequences

Proposed Action. Minor, indirect beneficial effects would be expected. While there are no federally regulated floodplains on the installation, implementation of the watershed management actions could result in beneficial results by the reduction of sedimentation, erosion, and input into connected drainages with regulated floodplains off the installation during storm events.

No Action Alternative. Minor adverse effects would be expected. The No Action Alternative does not provide for the implementation of a routine assessment and monitoring program to protect water resources and their related habitats. Also, the No Action Alternative does not establish a formal set of management measures to protect and enhance regional floodplains by preventing or minimizing potential impacts resulting from mission-related activities.

10.7 Aquatic and Riparian Habitat

10.7.1 Existing Conditions

There are no naturally occurring surface water resources on the Depot. The principal drainages near the Depot are the Tom Payne Slough north of the Depot, Corral Hollow Creek to its south, and the San Joaquin River, into which both the Slough and the Creek flow, several miles east of the Depot. There is a percolation/evaporation pond on site that supports wetland vegetation and exhibits the structure and function of a wetland. Surface water runoff from the entire Depot is collected into a stormwater drainage system and transported to this unlined holding pond in the northern corner of the site. Water in the pond evaporates or percolates downward into the soil. If inflows exceed the capacity of the pond, excess water is pumped to a local drainage ditch that ultimately drains into the San Joaquin River, 4.5 miles northeast of the site (DLA 2013b). On the Annex, unlined ditches convey stormwater runoff to local percolation areas between farm fields (DLA 2012c).

10.7.2 Environmental Consequences

Proposed Action. Minor, indirect beneficial effects would be expected. While there is no naturally occurring habitat on the installation, implementation of the watershed management actions could result in beneficial results by the reduction of sedimentation, erosion, and input into connected drainages off the installation during storm events. Assessment of riparian habitats would provide a baseline that can be used in tracking conditions and trends of these habitats, which would allow management practices to be applied where and when needed. Additional management measures

established to protect or enhance riparian habitats would include proper planning; limiting pesticide and fertilizer use in the riparian buffer areas; and minimizing the modification of existing hydrologic characteristics to minimize erosion and sedimentation.

No Action Alternative. Minor adverse effects would be expected. The No Action Alternative does not provide for the implementation of a routine assessment and monitoring program to protect these habitats. Also, the No Action Alternative does not establish limited-use riparian buffers to protect water quality by reducing nonpoint source impacts associated with runoff and adjacent land uses, nor does it establish a formal set of management measures to protect and enhance these habitats by preventing or minimizing potential impacts resulting from mission-related activities.

10.8 Vegetation

10.8.1 Existing Conditions

There are limited natural lands at the Depot; a majority of the land has been previously disturbed and is developed with industrial land uses with minimal native vegetation. The remaining vegetation consists primarily of annual grasslands in the northern and eastern portions of the Depot. These areas are dominated by various brome species (*Bromus* ssp.), Bermuda grass (*Cynodon dactylon*), yellow starthistle (*Centaurea solstitialis*), and field mustard (*Brassica rapa*). The Annex consists of 460 acres of agricultural land, including cultivated crops such as alfalfa (*Medicago sativa*) and safflower (*Carthamus tinctoris*) (DLA 2013c). A non-native woodland consists of approximately 1 acre directly outside of the eastern end of the fenced portion of the Depot. This area is surrounded by railroad tracks and is dominated by dense stands of the non-native plant species giant cane (*Arundo donax*) and tree of heaven (*Ailanthus altissima*).

10.8.2 Environmental Consequences

Proposed Action. Beneficial effects for vegetation would be expected. Implementation of the Proposed Action would result in conservation of native vegetation, management of non-native vegetation, and the reestablishment of native vegetation. Also, under the Proposed Action, rare flora would be treated with added importance and valued for their contribution to the natural heritage of the Installation.

No Action Alternative. Minor adverse effects would be expected to continue. Under the No Action Alternative, the health and condition of the vegetation would not be improved, and management measures to maintain or increase the abundance and biodiversity of vegetation at the Depot would not be implemented, thereby resulting in a continuing decline in the quality and complexity of the vegetation communities. Decline in community quality and complexity would continue to affect site stability and wildlife habitat.

10.9 Wildlife

10.9.1 Existing Conditions

The Depot consists mainly of disturbed lands and small, fragmented annual grasslands which provide limited habitat value for wildlife. There are no sources of perennial water on the Depot, resulting in no habitat for fish. The areas that have the potential to offer habitat to wildlife include the

large water treatment retention basin, the baseball field and picnic area, and the agricultural fields in the Annex. For more information regarding wildlife at the Depot, refer to **Section 4.6.2** of the INRMP.

10.9.2 Environmental Consequences

Proposed Action. Beneficial effects for wildlife species would be expected. Implementation of the Proposed Action would result in conservation of native habitat and the reestablishment of native vegetation would result in the protection of habitat for various wildlife species. Also, under the Proposed Action, rare flora and fauna would be treated with added importance and valued for their contribution to the natural heritage of the Installation.

No Action Alternative. Minor adverse effects would be expected to continue. Under the No Action Alternative, the health and condition of the wildlife populations would not be improved, and management measures to maintain or increase the abundance and biodiversity of wildlife at the Depot would not be implemented. In addition, management measures designed to protect and enhance wildlife habitats (i.e., riparian, wetlands, terrestrial) would not be implemented, thereby resulting in a continuing decline in the quality and complexity of the habitats. Decline in habitat quality and complexity would continue to affect wildlife and biodiversity adversely.

10.10 Endangered, Threatened and Rare Species

10.10.1 Existing Conditions

No federally listed plant or wildlife species have been observed at the Defense Distribution Depot San Joaquin.

There are four CDFW state species of concern (SSC) bird and one state-threatened bird species that have been documented within 5 miles of the Depot: burrowing owl (*Athene cunicularia*); California horned lark (*Eremophila alpestris actia*); tricolored blackbird (*Agelaius tricolor*); Swainson's hawk (*Buteo swainsoni*); and song sparrow – Modesto population (*Melospiza melodia*). Two CDFW SSC mammals, one federal- and state-endangered mammal, and one federal-endangered and state-threatened mammal have been documented within 5 miles of the Depot: American badger (*Taxidea taxus*); riparian brush rabbit (*Sylvilagus bachmani riparius*); San Joaquin kit fox (*Vulpes macrotis mutica*); and San Joaquin pocket mouse (*Perognathus inornatus inornatus*). Additionally, one federally and state-threatened amphibian, the California tiger salamander (*Ambystoma californiense*), and one CDFW SSC invertebrate, Sacramento anthicid beetle (*Anthicus sacramento*), have been documented within 5 miles of the Depot.

State-listed species that are not federally listed under the ESA are considered in management of natural resources. There are state-listed species, migratory birds, and plant species of concern at the Depot that are not provided species-specific management but are taken into consideration in developing land management actions and priorities. For more information regarding endangered, threatened and rare species at the Depot, refer to Section 4.6.3 of the INRMP.

10.10.2 Environmental Consequences

Proposed Action. Beneficial effects on all special-status species, including listed state-listed species and SSC, at the installation would be expected. Implementation of the Proposed Action

would provide protection and management for ESA-listed and state-listed species found at the installation. Also, under the Proposed Action, rare flora and fauna would be treated with added importance and valued for their contribution to the natural heritage of the Installation.

No Action Alternative. Minor adverse effects would be expected for special-status species not protected under the ESA. The No Action Alternative does not provide special measures for the protection and management of these species or future nesting activity that might occur. Implementation of the No Action Alternative would continue to leave these species vulnerable to potential impacts that could adversely affect their existence at the Installation.

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11 Cumulative and Other Effects

A cumulative effect is defined as an effect on the environment that results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place locally or regionally over a period of time.

Implementation of the INRMP would result in a comprehensive natural resources management strategy for the Depot that represents compliance, restoration, prevention, and conservation; initiates a cohesive management approach for natural resources on the Depot; and meets legal and policy requirements consistent with national natural resources management philosophies. Implementation would be expected initially to improve existing environmental conditions at the Depot, as shown by the potential for beneficial effects in Table 2. Over time, adoption of the Proposed Action would enable the Depot to achieve their goal of maintaining ecosystem viability and ensuring sustainability of desired military mission conditions.

Table 10. Summary of Potential Environmental Consequences

Resource Area/Environmental Condition	Environmental Consequence	
	No Action Alternative	Proposed Action
Land Use	None	Beneficial
Climate	None	None
Air Quality	None	None
Geology	Minor Adverse	Beneficial
Topography	Minor Adverse	Beneficial
Soils	Minor Adverse	Beneficial
Water Resources	Minor Adverse	Beneficial
Wetlands	Minor Adverse	None
Floodplains	None	None
Aquatic Habitat	None	None
Riparian Habitat	Minor Adverse	Beneficial
Vegetation	Minor Adverse	Beneficial
Wildlife	Minor Adverse	Beneficial
Endangered, Threatened, and Rare Species	Minor Adverse	Beneficial
Cultural Resources	None	None

Table 10. Summary of Potential Environmental Consequences

Resource Area/Environmental Condition	Environmental Consequence	
	No Action Alternative	Proposed Action
Hazardous and Toxic Materials	None	None
Noise	None	None
Socioeconomic Resources	None	None
Environmental Justice	None	None
Infrastructure	None	None

Although growth and development can be expected to continue outside of the Depot and within the surrounding natural areas, cumulative adverse effects on these resources would not be expected when added to the effects of activities associated with the proposed management measures included in the INRMP.

11.1 Unavoidable Adverse Effects

No unavoidable adverse effects would occur as a result of implementing the Proposed Action.

11.2 Compatibility of the Proposed Action and Alternatives with the Objectives of Federal, Regional, State, and Local Land Use Plans, Policies, and Controls

Implementation of the installation's INRMP would not result in any significant or incompatible land use changes on- or off-installation. The INRMP considers the installation's existing conditions and constraints in the siting, design, and timing of the proposed management goals, objectives, and actions.

11.3 Relationship between Short-term Uses of the Human Environment and Maintenance and Enhancement of Long-term Productivity

The long-term beneficial effects would ensure that the installation is able to meet its current and future mission requirements, while ensuring the sustainability of the installation.

11.4 Irreversible and Irretrievable Commitment of Resources

The Proposed Action would not involve the irreversible and irretrievable commitment of energy resources and human resources.

11.5 Natural or Depletable Resource Requirements and Conservation Potential

The Proposed Action would require no significant use of natural or depletable resources.

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12 Conclusion

Section 1.4 provides information on which resource areas were selected to be analyzed in detail in the EA and the rationale behind each decision. Table 2 summarizes the potential impacts of the Proposed Action and the No Action Alternative on the environmental resource areas analyzed in detail. Implementation of the Proposed Action or No Action Alternative would not result in any individual or cumulatively significant environmental impacts. Therefore, preparation of an EIS is not warranted and issuance of a FONSI would be appropriate.

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13 References

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